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June 14, 2019

Via E-mail

Andrea Leshak, Esq.
Office of Regional Counsel
U.S. Environmental Protection Agency,
Region 2
290 Broadway, 17th Floor
New York, New York 10007-1866

Re: PROTECO Site in Puerto Rico

Dear Ms. Leshak:

This is the response made on behalf of SmithKline Beecham Pharmaceuticals Co. ("Pharmaceuticals") to the United States Environmental Protection Agency's ("EPA's") March 28, 2019 Request for Information addressed to James Ford with respect to the above-referenced site (the "RFI").

By way of introducing the parties, Pharmaceuticals, a Delaware corporation, was incorporated on or about July 22, 1970 as SK&F Mfg. Co., which later changed its name to SK&F Lab Co. Pharmaceuticals is a wholly owned subsidiary of GlaxoSmithKline LLC ("GSK").

This response is based upon Pharmaceuticals' and GSK's search for documents and information in their possession relating to the former Pharmaceuticals facility located at South Main Street, Sabana Gardens Industrial Park, Carolina, Puerto Rico (the "Facility"), which is the subject of the RFI, and to the PROTECO Site.

Pharmaceuticals believes that a Closure Plan and Closure Certification for the Facility was filed with EPA in or about late 1989. Neither Pharmaceuticals nor GSK has that document in its possession, but that document should be in the possession of EPA. That document likely contains information that would be relevant to the RFI.

Pharmaceuticals reserves its right to continue to review and to supplement, modify, and/or amend its responses should additional information become available.

Pharmaceuticals' Response to EPA's Request for Information

Pharmaceuticals objects to the instructions provided with the RFI, the definitions, and the requests to the extent any of those exceed the authority given to EPA in 42 U.S.C. § 9604.

Subject to these objections, Pharmaceuticals responds as follows with respect to the Carolina facility:

1. Pharmaceuticals objects to this request as beyond the authority granted in CERCLA Section 104(e). Without waiving such objection, the mailing address for Pharmaceuticals and GSK is 5 Crescent Drive, Philadelphia, PA 19112.

2. Pharmaceuticals objects to this request as beyond the authority granted in CERCLA Section 104(e). Without waiving such objection, SK&F Mfg. Co. was incorporated on or about July 22, 1970 in Delaware. On or about May 25, 1976 the name of the corporation was changed to SK&F Lab Co. On or about April 17, 1990 the name of the corporation was changed to SmithKline Beecham Pharmaceuticals Co. Pharmaceuticals is a wholly owned subsidiary of GSK.

3. See response to Request No. 2.

4. See response to Request No. 2.

5. Pharmaceuticals objects to this request as beyond the authority granted in CERCLA Section 104(e). Without waiving such objection, Pharmaceuticals' authority to do business in Puerto Rico was obtained on or about April 6, 1976 and withdrawn on or about December 29, 2010.

6. Operations at the Facility began in or about 1970 on leased land. Operations ceased in or about July 1987 and the plant was sold to ICI Pharmaceuticals P.R. Inc. Pharmaceuticals is continuing its search for relevant lease and sale documents.

7. Pharmaceuticals objects to this request as beyond the authority granted in CERCLA Section 104(e).

8. Pharmaceuticals objects to this request as beyond the authority granted in CERCLA Section 104(e). Without waiving such objection, the Facility consisted of a main building that included areas for administration, pharmaceutical preparation, packaging, chemical production, and warehousing for raw materials and finished goods. See Facility Drawing included in attached Pharmaceuticals' November 14, 1980 Interim Status RCRA Permit Application No. PRD 000706424. There was a separate warehouse for additional storage of equipment and material. *Id*. Initial operations were the production of Diazide® and Direnium® in finished product form

and the manufacture of Stelazine® base and finished Stelazine® product. Those operations were relocated to a facility in Cidra, P.R. in the late 1970s, at which time the Facility was renovated for the production of Tagamet® tablets, injectables, and oral liquid dosage forms. Stelazine® chemical base continued to be produced on an intermittent basis at the Facility. In or about 1982 production of Tagamet® was relocated to a facility in Cidra, P.R., following which the Facility was used for administrative offices, warehousing, and distribution and packaging operations for Tagamet®. Tagamet® production generally consisted of: mixing cimetidine powder with edible non-drug material for compaction and pressing; tablet coating with edible substances; and printing of brand name on capsules and tablets. In or about the early 1980s chemical manufacturing operations were relocated to a facility in Guayama, P.R.

9. See response to Request No. 2.

10. Pharmaceuticals objects to this request as beyond the authority granted in CERCLA Section 104(e). Without waiving such objection, see response to Request No. 6.

11. Pharmaceuticals has not identified any documents or information responsive to this request.

12. Pharmaceuticals has not identified any documents or information responsive to this request.

13. Pharmaceuticals has not identified any documents or information responsive to this request.

14. Pharmaceuticals has not identified any documents or information responsive to this request.

15. Pharmaceuticals has not identified any documents or information responsive to this request.

16. See response to Request No. 2.

17. Pharmaceuticals has no information or document reflecting transactions involving the Site.

18. See attached documents, including: March 20, 1981 Environmental Survey; June 28, 1985 Pharmaceuticals' response to EPA comments on RCRA Part B Permit Application; March 18, 1981 Pharmaceutical Application for Approval for the Operation of Emission Sources in Puerto Rico; Environmental Quality Board Air Pollutant Emissions Summary; Pharmaceuticals' November 14, 1980 Interim Status

RCRA Permit Application No. PRD 000706424; and "Used in Cidra-Carolina," noting that this document includes materials that may have been used only in Cidra..

19. See response to Request No. 18.

20. Pharmaceuticals objects to this request as beyond the authority granted in CERCLA Section 104(e). Without waiving such objection, see response to Request No. 18.

21. Pharmaceuticals objects to this request as beyond the authority granted in CERCLA Section 104(e). Without waiving such objection, Pharmaceuticals has not identified any documents or information responsive to this request.

22. Pharmaceuticals has not identified any documents or information responsive to this request.

23. Pharmaceuticals objects to this request as beyond the authority granted in CERCLA Section 104(e). Without waiving such objection, Pharmaceuticals has not identified any documents or information responsive to this request.

24. Pharmaceuticals has not identified any documents or information responsive to this request.

25. Pharmaceuticals objects to this request as beyond the authority granted in CERCLA Section 104(e). Without waiving such objection, Pharmaceuticals has not identified any documents or information responsive to this request.

26. Pharmaceuticals has not identified any documents or information responsive to this request.

27. Pharmaceuticals objects to this request as beyond the authority granted in CERCLA Section 104(e). Without waiving such objection, Pharmaceuticals has not identified any documents or information responsive to this request.

28. Pharmaceuticals has not identified any documents or information responsive to this request other than those provided herewith.

29. Pharmaceuticals' and GSK's investigation is continuing.

30. Pharmaceuticals objects to this request as beyond the authority granted in CERCLA Section 104(e).

31. Pharmaceuticals has not identified any documents or information responsive to this request.

32. Pharmaceuticals has not identified any documents or information responsive to this request.

33. Pharmaceuticals has not identified any documents or information responsive to this request.

34. The undersigned counsel for Pharmaceuticals drafted this response. He has no personal knowledge of the responses. Searches for responsive documents were supervised by Andrew Boczkowski, Esq. (Assistant General Counsel), Justin Huang, Esq. (Senior Counsel), and Jan Landwehr (paralegal), each of GSK. None of these personnel has personal knowledge of the responses.

Very truly yours,

Glenn A. Harris

GAH/mds

cc: Zolymar Luna

Eng: PR. SKF - - Carolina (Gen'l File)

SK&F

FEDERAL EXPRESS DELIVERY

SK&F LAB CO.
P.O. Box 3930, Carolina, Puerto Rico 00630

June 28, 1985

Eng. James Reidy, Chief
PERMIT SECTION-Solid Waste Branch
ENVIRONMENTAL PROTECTION AGENCY
Region II
26 Federal Plaza
New York, New York 10278

RE: TECHNICAL EVALUATION OF
PART "B" PERMIT APPLICATION
EPA ID No. PRD000706424

Dear Mr. Reidy:

Herewith is SK&F LAB CO's response to the comments issued by Environmental Protection Agency (EPA) upon our RCRA PART "B" Permit Application. These comments were received at our office by means of your letter dated May 24, 1985.

The attached handbook contains our PART "B" PERMIT APPLICATION of September 8, 1983 as revised after responding to EPA comments of December 14, 1984 and May 24, 1985.

If you have any questions regarding our responses, please feel free to contact me at your earliest convenience at (809) 757-8070 Ext. 3264.

Cordially yours,

Carlos A. Acevedo
Manager, Safety & Env. Eng.

CAA:sfr

c: Eng. Jesus Medero EQB
Eng. Ismael Guzman SK&F
Eng. James Hagan SKB

ESEF 100012138

RESPONSE TO TECHNICAL EVALUATION OF PART B PERMIT APPLICATION
SK&F LAB CO - CAROLINA, P. R.
EPA ID NUMBER PRD 000706424

	EPA COMMENTS - 5/24/85	SK&F LAB CO RESPONSE - 6/28/85
A	PART "A" APPLICATION A-1 Please give a reason why the estimated annual quantity of wastes has been reduced to 26,900 kilograms per year as indicated in the revised Part "A" Permit application from 104,660 kilograms per year notified in the original Part "A" Permit Application.	Estimated annual quantity of wastes has been reduced by 77,760 kilograns per year because early in 1981 the small chemical manufacturing facility that we were operating within this site was transferred to our Chemical Division Plant in Guayama, Puerto Rico. After this move the hazardous waste generation potential was reduced significantly.
	A-2 Since the maximum capacity of the drum storage area is eighty drums as indicated in Part "B" permit application, the revised Part "A" permit application must be submitted to show this change.	Revised Part "A" Permit Application is included. (See Handbook Pages 8 to 21.
B	IN-LINE NEUTRALIZATION B-1 Please provide analysis of hazardous wastes neutralized in the in-line neutralization process.	Analysis of wastes neutralized in this facility are not available data is four (4) year old. However, the neutralized wastes were hazardous solely because their pH was extreme low (2.0).
	B-2 Describe the in-line neutralization process and method employed to neutralize the wastes.	M-Aminobenzotrifluoride is reacted with caustic soda in a solvent media to form Fluamine, an intermediate of the process. Unreacted M-Aminobenzotrifluoride in the Fluamine Batch is then removed with excess muriatic acid and water washes, this layer being removed after in-line neutralization with potassium carbonate to pH above 7.0. The water layer is discarded through drain.

RESPONSE TO TECHNICAL EVALUATION OF PART B PERMIT APPLICATION
SK&F LAB CO - CAROLINA, P. R.
EPA ID NUMBER PRD 000706424

	EPA COMMENTS - 5/24/85	SK&F LAB CO RESPONSE - 6/28/85
C	TRAILER	
	C-1 Identification and quantity of the hazardous wastes stored in the trailer must be provided, including a copy of the manifest noted as L81-1, May 26, 1981.	Copy of the Manifest L81-1, May 26, 1981 is attached. All materials listed on this manifest were stored in the trailer before transfering them to the Hazardous Waste Containers Storage Area. Further explanation is given on C-2 below.
	C-2 Please explain why the trailer was utilized during the period of August, 1980 to May, 1981 in spite of the fact that the hazardous waste container storage area was already in operation.	Since the decision was made to transfer the chemical manufacturing operations to Guayama, P.R. a inventory built up was required to continue the manufacturing of asociated tablet while the move takes place. This special manufacturing schedule required additional storage facilities to manage the adnormal material flow. A trailer was lease for this purpose. Recovered solvents from the chemical operation were placed on a raw material quarentene area (flammables vault) until quality control analysis were performed to determine if solvents were spent or could be reused back in the process. Once any of the solvents were declared spent, they were move to our Embargo Area (Storage Trailer), until all debits from production scheduled were made and decision made to discard them or derive any other beneficial use. Once a decision for discarding were made, spent solvents were transferred to our Hazardous Waste Containers Storage Area. These solvents were not hold more than 90 days in the Embargo Trailer and neither accumulated beyond 1,000 kilos in it.
	C-3 Please provide a leasing contract or any document to show the name of the leasing company and leasing period.	This trailer was leased from P.R. Marine Management, Inc. (Navieras de Puerto Rico). Being a five year old contract we have not find it yet.

RESPONSE TO TECHNICAL EVALUATION OF PART B PERMIT APPLICATION
SK&F LAB CO - CAROLINA, P. R.
EPA ID NUMBER PRD 000706424

	EPA COMMENTS - 5/24/85	SK&F LAB CO RESPONSE - 6/28/85
D	FACILITY DESCRIPTION	
	D-1 The basis for classifying the hazardous wastes generated from the facility as D001, D002, D003, F002 and F005, must be explained. For example, waste classified as D001 must be accompanied with its flash point.	Please refer to the attached handbook, pages 61, 63, 64 and Appendix D (page 174 to 178 - Part I).
	D-2 As per 40 CFR 270.14(b)(19), the following requirements must be included on the topographic map: - Date - Run-off control system, storm, sanitary, and process sewerage systems, and loading and unloading areas - Contour lines	Please refer to attached handbook Map (Drawings TM-1 & TM-2). Pages 47 & 48.
	D-3 The boundary of the facility shown in the Figure (4), is contradicted to that in the Figure (5).	Contradictions were corrected.
	D-4 Please provide the topographic map at the scale of 1 inch equal to 200 feet.	Topographic map is included on attached handbook(Drawings TM-1 and TM-2). Pages 47 and 48.
	D-5 The following traffic routes must be indicated: - For carrying storage drums from the process areas to the drum storage area. - For trucks to be loaded and/or unloaded	Please refer to Topographic Map. Pages 47 and 48 of handbook.

RESPONSE TO TECHNICAL EVALUATION OF PART B PERMIT APPLICATION
SK&F LAB CO – CAROLINA, P. R.
EPA ID NUMBER PRD 000706424

	EPA COMMENTS – 5/24/85	SK&F LAB CO RESPONSE – 6/28/85
E	WASTE CHARACTERISTICS	
	E-1 Table I shows that the characteristics of the wastes are ignitable, corrosive and reactive. Please indicate their respective flash point, pH and conditions under which the wastes start to react.	Revised Table I is included (Page 61 of handbook). However, as to specify, the conditions under which reactive wastes start to react is highly difficult. We are refering as D003 to laboratory off. Specification commercially available reagents that could be cyanide or sulfide bearing wastes under extreme pH conditions. We decided to manage as hazardous reactive waste all rejected commercial laboratory reagents that show in their chemical formula any sulphur or cyanide radical. (Not listed in CFR 261.33).
	E-2 If the rejected and unused raw materials and laboratory reagents are to be stored in the drum containers which were originally shipped at the time of purchase for approval of establishing compatibility of wastes with the drums, please describe the procedures utilized to assure what each containers store is the wastes stored originally and so they are compatible to each other.	Refer to attached procedure – SA-1014.
	E-3 Procedures for characterizing collected leak, spills, and run-off must be described.	Refer to attached procedure – SA-1011.
	E-4 Please give the name of the contract laboratories to perform sampling analysis and also its document of the Quality Assurance/Quality Control Plan.	Contracted Laboratory: Environmental Quality Laboratories, Inc. (EQ Lab) P. O. Box 8723 Santurce, P. R. 00910 Tels: (809) 725-5333 (809) 725-3708 Their QA/QC Plan will follow. Contracted Lab. claim that this document is too big and confidential. They will prepare a summary for EPA use.

RESPONSE TO TECHNICAL EVALUATION OF PART B PERMIT APPLICATION
SK&F LAB CO - CAROLINA, P. R.
EPA ID NUMBER PRD 000706424

	EPA COMMENTS - 5/24/85	SK&F LAB CO RESPONSE - 6/28/85
	E-5 Table 3 must document which specific method is used for organic analysis. If more than one method is used, the reasons or circumstances under which each is used must be specified. Method 8010 will not detect methanol and method 8020 is recommended for use in determining aromatic volatile organics.	Revised Table 3 is attached - Page 65
	E-6 Please describe or provide document of "Internal Written Procedures" to be used for sampling.	Internal written procedure is attached - SA-1020 and SA-1021.
F	PROCESS INFORMATION F-1 English translation of "Standard Operating Procedures" utilized to fill and empty the waste tank is necessary for reviewing. The procedures should include how the waste flow in the waste tank is controlled and what criteria are used to determine whether the collected wastes are hazardous.	English translation of all spanish procedures are included.
	F-2 A reference document (Permit Writers' Guidance Manual for Hazardous Waste Tanks, EPA Contract 68-01-6515 WA 02-004) is enclosed for cualculating the minimum shell thickness of the storage tank. Please provide the minimum shell thickness.	According to UL 142 (see Appendix F Tank Survey) Pages 276 to 283, the minimum shell tickness of a horizontal carbon steel tank with capacity between 1,101 to 9,000 gallons should be 0.167 inches.

RESPONSE TO TECHNICAL EVALUATION OF PART B PERMIT APPLICATION
SK&F LAB CO - CAROLINA, P. R.
EPA ID NUMBER PRD 000706424

	EPA COMMENTS - 5/24/85	SK&F LAB CO RESPONSE - 6/28/85
	F-3 Demonstrate the compatibility of the hazardous wastes with the tank construction and coating materials, and additionally the rate of tank corrosion or erosion must be provided.	This tank and its coating had being in contacted with the waste since early 1977 when accumulation started. The tank survey performed in April 1984 (Appendix F-Page 276) demonstrated that the system is compatible with the waste, since NO significant erosion or corrosion was detected. We are including herewith information of compatibility of the Carbo Zinc II coating with Methylene Chloride, as provided by the Manufacturer (refer to pages 300 to 305 of the attached handbook). We has initiated business with the Mogul Corporation to implement (if feasible) a Test Corrosion Coupon Program in this tank to determine corrosion rate on both coated and uncoated material of construction. Please refer to SOP-SA-1014.
G	PROCEDURES TO PREVENT HAZARDS	
	G-1 As per 40 CFR 264.14(c), spanish and english signs must be posted.	All signs will be posted both in english and spanish.
	G-2 Please provide english translation of the inspection forms.	Inspection forms translated to english are herewith included, and inserted on handbook.
	G-3 The frequency of inspection depends on a corrosion allowance and the rate of corrosion. It is recommended to have the external tank inspection every two years to determine the tank thickness and the detailed internal inspection every 5 years.	Tank inspection will be implemented as you recommend. See SOP-SA-1015 attached.
	G-4 As per 40 CFR 264.194(b), the procedures to be employed to perform the internal tank inspection must be described	Written procedure is attached - SOP-SA-1016.

RESPONSE TO TECHNICAL EVALUATION OF PART B PERMIT APPLICATION
SK&F LAB CO - CAROLINA, P. R.
EPA ID NUMBER PRD 000706424

	EPA COMMENTS - 5/24/85	SK&F LAB CO RESPONSE - 6/28/85
	G-5 The company is responsible for compliance with 40 CFR 264.52(c). The requirements can be achieved either by reaching agreements or by documenting refusal as mentioned in 40 CFR 264.37(b). However, in either way, the company's attempt to reach agreements and its reached agreements or refusals must be documented and submitted with the Part "B" permit application.	Please refer to handbook - Pages 123b to 123zg
	G-6 Please describe the capacity of emergency equipment.	Please refer to page 94C of handbook. A list of all emergency equipment and materials available in site are provided.
H	CLOSURE PLAN	
	H-1 Describe criteria used to determine whether collected and decontaminated materials are hazardous.	Please refer to revised Closure Plan, pages 131 to 1385.
	H-2 The revised page 133 still shows that the off-site landfill will be used to remove the drum containers which is not the policy of the company. Correction is required.	Please refer to attached revised Closure Plan.
	H-3 The revised page 138 of "Closure Cost Estimated" shows that the hazardous waste in the storage tank will be transferred to the drum containers before shipping to the off-site incinerator. However, it is inconsistent with the procedures described for the removal of the hazardous wastes in the tank. Correction is required.	Please refer to attached revised Closure Plan.

RESPONSE TO TECHNICAL EVALUATION OF PART B PERMIT APPLICATION
SK&F LAB CO - CAROLINA, P. R.
EPA ID NUMBER PRD 000706424

EPA COMMENTS - 5/24/85	SK&F LAB CO RESPONSE - 6/28/85
H-4 Rafael Cruz Perez is not an independent professional engineer, so he is not qualified to the closure certification.	Rafael Cruz Perez is not an employee of SK&F Lab Co neither of any SmithKline-Beckman Company. He is a well known consultant in P. R. that provide independent services to various industries.

ENVIRONMENTAL SURVEY

SK&F LAB CO.
MAIN STREET
SABANA GARDENS INDUSTRIAL PARK
P.O. BOX 3930 CERAMICA ANNEX
CAROLINA, PUERTO RICO

DATE: MARCH 20, 1981
CONTACT: CARLOS ACEVEDO
SURVEYOR: RENATO D. ASUNCION

The SK&F Lab Co. facilities are located on approximately 5 acres of leased ground and consist of:

- a main building including areas for administration, pharmaceutical preparation, packaging, chemical production, and warehousing for raw material and finished goods;
- a warehouse area (across the street) for additional storage of equipment and material.

Operations were begun early in 1970 with the production of 'Diazide' and 'Direnium' in finished product form and the manufacture of 'Stelazine' base and finished 'Stelazine' product.

In the late 1970's, the production of finished 'Diazide', 'Direnium' and 'Stelazine' was relocated to a new facility in Cidra, and the Carolina facility was renovated for production of 'Tagamet' tablets, injectables and oral liquid dosage forms. 'Stelazine' chemical base continued to be produced at Carolina on an intermittent basis.

By mid 1982, manufacture of 'Tagamet' dosage forms will be relocated to a new facility in Cidra (Cidra II). After this time the Carolina facility will consist of administrative offices, warehousing and distribution and packaging operations for 'Tagamet'. A decision on relocation of the 'Stelazine' base production unit has not been made at this time.

Major environmental systems serving this plant are:

- 4 dust collectors
- 3 boilers
- vacuum cleaners
- a carbon adsorption unit for solvent laden air control

Corporate Environmental Services conducted an environmental survey of this site on March 20, 1981, which covered water supply, wastewater, solid waste, air pollution and spill control plan. These survey modules are discussed below.

Water Supply

The Puerto Rico Aqueduct and Sewer Authority (PRASA) supplies water for domestic, process, sanitary and utility purposes. There are no water wells installed in the plant; therefore, the analyses required by the "National Interim Primary Drinking Standards" (NIPDS) are not being carried out.

Wastewater

Wastewater from the plant is discharged to the Puerto Rico Aqueductos and Sewer Authority System (PRASA). There are no limits presently imposed on flow or watewater constituency, and no permits or pretreatment facilities are required.

Solid Wastes

This plant generates and stores nonhazardous and hazardous wastes. Hazardous waste materials are covered under RCRA Permit No. PRD 000706424 and are transported to an approved site and disposed of by a licensed contractor. Permit copy is in Corporate Environmental Services file.

Procedures and plans currently required by RCRA are being followed. These include:

- storage of wastes in approved containers,
- shipment of wastes offsite by EPA-licensed haulers under an approved manifest,
- maintenance of adequate records, waste analysis plans, training programs.

Air Pollution Control

A single operating permit application covering different emission sources was filed on March 18, 1981, with the P.R. Environmental Quality Board (EQB) instead of the usual multiple permit application filing system in order to simplify paperwork and other permitting procedures. Currently, EQB has not responded to this application.

The amended version of the "P.R. Regulation for the Control of Air Pollution" requires all sources of air pollution to write an Air Pollution Emergency Plan and Emergency Response Plan for sources which may release, leak or emit toxic or hazardous substances. This plant does not have either plan on file.

The survey file includes copies of applicable air pollution control plans and procedures.

Spill Prevention Control

Current spill prevention control and countermeasures plan was prepared in June 1976. A copy of this plan in in Corporate Environmental Services file.

Comments

Environmental procedures are documented in a professional manner, and operations are carried out in an environmentally sound way. The environmental management at this site reflects an awareness of the need for an environmentally responsible image.

Recommendations

Corporate Environmental Services recommends that Carolina SK&F Lab Co. management:

1. follow up approval of permit to operate air emission sources filed with EQB;

2. prepare a standby air pollution control emergency plan as required by the June 1980 Puerto Rico Regulation for the Control of Air Pollution;

3. prepare an emergency response plan as stipulated in Rule 107(c) of the June 1980 Puerto Rico Regulation for the Control of Air Pollution;

4. write operating procedures for dust collectors for access by operators and maintenance personnel.

RDA/ctp

SK&F LAB CO.
P.O. Box 3930, Carolina, Puerto Rico 00630

November 14, 1980

Mr. Harry Ruisi
Permits Administration Branch
U.S. Environmental Protection Agency
26 Federal Plaza
New York, New York 10007

Dear Mr. Ruisi:

Herewith Interim Status RCRA Permits Application No. PRD 000706424 covering hazardous waste activities of SK&F Lab Co., Carolina, Puerto Rico.

Very truly yours,

SK&F LAB CO.

Carlos A. Acevedo
Manager
Safety and Environmental
Engineering

Enclosure

CAA/cav

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved. OMB No. 2050-0034

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER

F	P	R	D	0	0	0	7	0	6	4	2	4	1

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

YR.	MO.	DAY
7 0	0 1	0 2

[ ] 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

YR.	MO.	DAY

B. REVISED APPLICATION *(place an "X" below and complete Item I above)*

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES – CODES AND DESIGN CAPACITIES

A. PROCESS CODE – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

B. PROCESS DESIGN CAPACITY – For each code entered in column A enter the capacity of the process.

1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP 1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G	
X-2	T 0 3	20	E	
	S 0 1	55	G	
	S 0 2	7,000	G	
3	T 0 1	100	U	
4				
5				
6				
7				
8				
9				
10				

CONTINUE ON REVERSE

Please print or type in the unshaded areas only
(fill—in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved. OMB No. [illegible]

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

1	2													13	14	15	
F	P	R	D	0	0	0	7	0	6	4	2	4					D

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill—in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill—in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

LABEL ITEMS

- I. EPA I.D. NUMBER
- III. FACILITY NAME
- V. FACILITY MAILING ADDRESS
- VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold—faced terms.

SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	X		
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X		
Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED
B. Does or will this facility *(either existing or proposed)* include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
D. Is this a proposed facility *(other than those described in A or B above)* which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP: S K & F L A B C O

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 A C E V E D O C A R L O S E N V E N G M A N A G E R	8 0 9 | 7 6 8 | 1 5 7 0

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX	B. CITY OR TOWN	C. STATE	D. ZIP CODE
3 P O B O X 3 9 3 0	4 C A R O L I N A	P R	0 0 6 3 0

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER	B. COUNTY NAME	C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
S O U T H M A I N S T R E E T	S A B A N A G A R D E N S I N D . P A R K	6 C A R O L I N A	P R	0 0 6 3 0	

CONTINUE ON REVERSE

EPA Form 3510-1 (6-80)

Continued from page 2.

NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1): W P R D 0 0 0 7 0 6 4 2 4 | T/A | C 1

FOR OFFICIAL USE ONLY: W DUP | T/A | C 2 DUP

I. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	F002	50,000	K	S02 S01	Contracted Disposal
2	F002	460	K	T01 S01	Contracted Disposal
3	F005	1,500	K	S02 S01	Contracted Disposal
4	F005	400	K	T01 S01	Contracted Disposal
5	D001	20,000	K	T01 S01	Contracted Disposal
6	D001	29,000	K	S02 S01	Contracted Disposal
7	F002	3, 300	K	S02 S01	Contracted Disposal
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

CONTINUE ON REVERSE

ntinued from the front.

V. DESCRIPTION OF HAZARDOUS WASTES *(continued)*

USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. *(enter from page 1)*

P	R	D	0	0	0	7	0	6	4	2	4	T/A	C
													6

VI. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail).*

VII. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground–level)* that clearly delineate all existing structures; existing storage, trea t and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail).*

VIII. FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*
18 25 06	65 58 56

IX. FACILITY OWNER

[X] A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. *(area code & no.)*

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
	C G		

X. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
José M. García Vice-President Gen. Serv. & Eng.		

XI. OPERATOR CERTIFICATION

I ce nder penalty of law that I have personally examined and am familiar with the information submitted in this and all attached dc ts, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the su cted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
José M. García Vice-President Gen. Serv. & Eng.		

CONTINUE ON PAGE 5

CONTINUED FROM THE FRONT

II. SIC CODES (4-digit, in order of priority)

	A. FIRST	B. SECOND	C. THIRD	D. FOURTH
(specify)	PHARMACEUTICAL PREPARATION	MEDICAL CHEMICALS		
	2834	2833		

III. OPERATOR INFORMATION

A. NAME: S K & F L A B C O

B. Is the name listed in Item VIII-A also the owner? [X] YES [ ] NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)
F = FEDERAL; S = STATE; P = PRIVATE; M = PUBLIC (other than federal or state); O = OTHER (specify)
P

D. PHONE (area code & no.): A 809 768 1570

E. STREET OR P.O. BOX: P O B O X 3 9 3 0

F. CITY OR TOWN: C A R O L I N A

G. STATE: P R

H. ZIP CODE: 0 0 6 3 0

IX. INDIAN LAND

Is the facility located on Indian lands? [ ] YES [ ] NO

V. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water): N / A

D. PSD (Air Emissions from Proposed Sources): 9 P N / A

B. UIC (Underground Injection of Fluids): U N / A

E. OTHER (specify): 9 1 2 7 9 0 9 7 8 1 - 1 1 0 (specify) P.R. ENVIRONMENTAL QUALITY BOARD-AIR EMISSION SOURCE

C. RCRA (Hazardous Wastes): P R D 0 0 0 7 0 6 4 2 4

E. OTHER (specify): 9 (specify)

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property bounderies. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

- Formulation of Pharmaceuticals in therapeutic dosage form such as Tablets, Injeectables and syrup.
- Packaging of Finished Pharmaceutical Products.
- Manufacturing of bulk, unompounded medicinal chemical.

XIII. CERTIFICATION (see instructions)

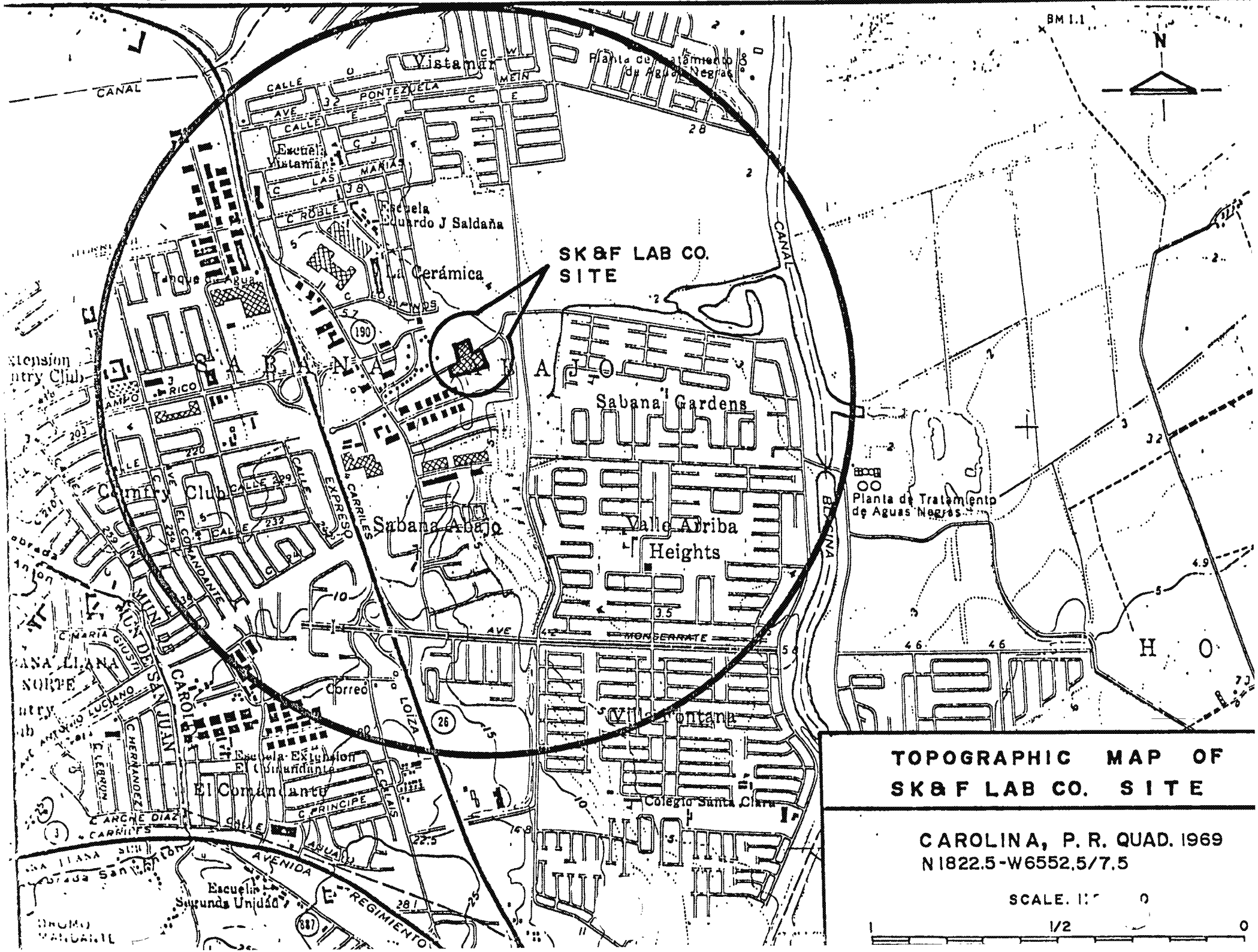
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
(sé M. García Vice-President Gen. Serv. & Eng.		

COMMENTS FOR OFFICIAL USE ONLY

Continued from page 4.

V. FACILITY DRAWING *(see page 4)*



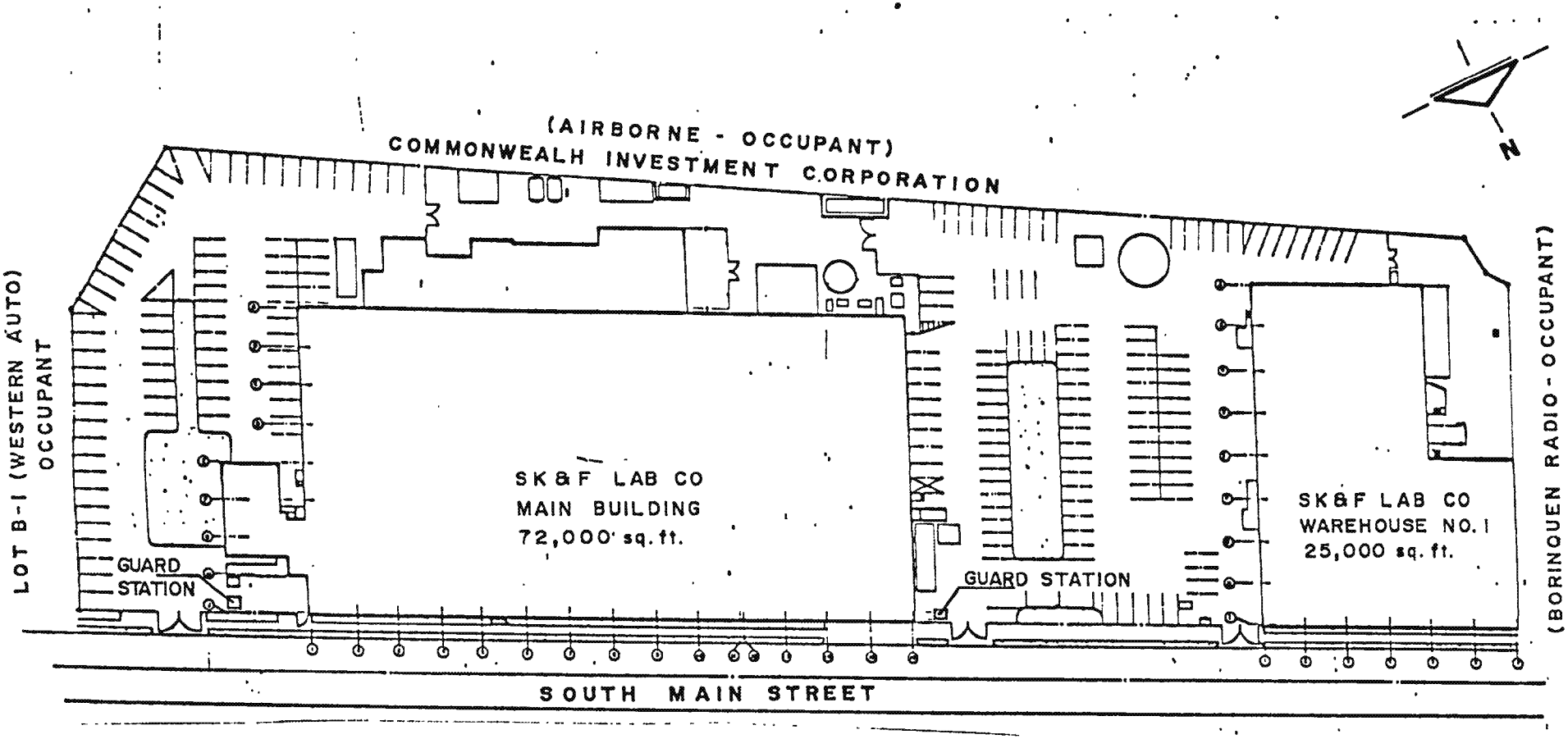
TOPOGRAPHIC MAP OF SK&F LAB CO. SITE

CAROLINA, P. R. QUAD. 1969
N1822.5-W6552.5/7.5

SCALE. 1:

1 1/2 0

GSK-PROTECO_000020



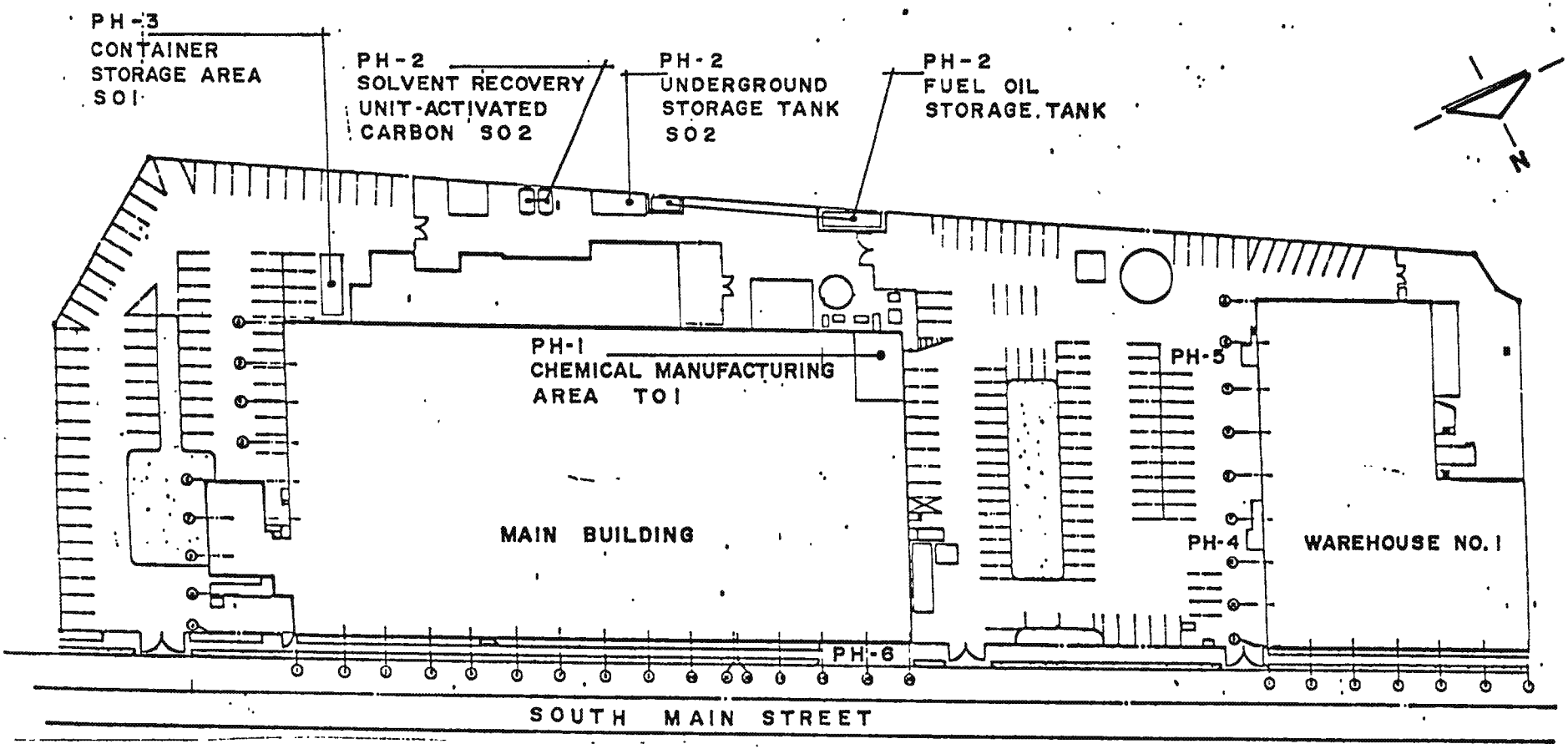
0 25 50 75 100 200 FEET

GRAPHICS SCALE

FACILITY BOUNDARIES

SK&F LAB CO

CAROLINA, P. R.

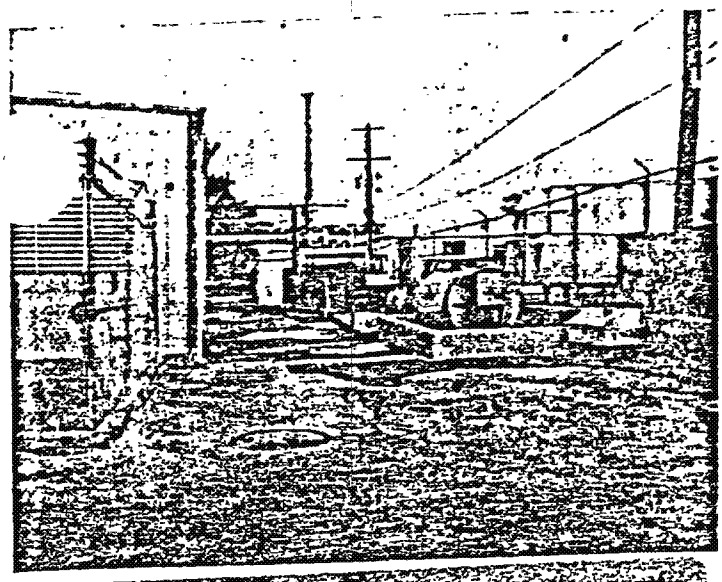


PH-1 - PHOTO REFERENCE
SEE EXHIBIT FORM 3 - VI

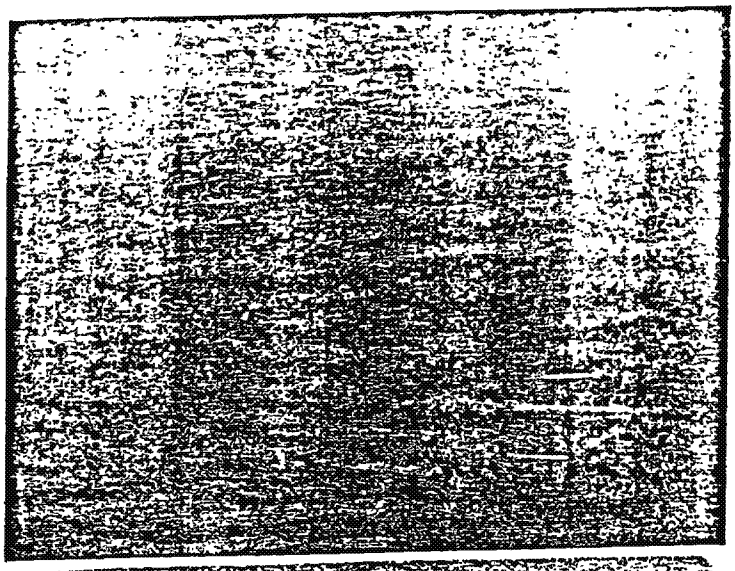
0 25 50 75 100 200 FEET
GRAPHICS SCALE

FACILITY DRAWING

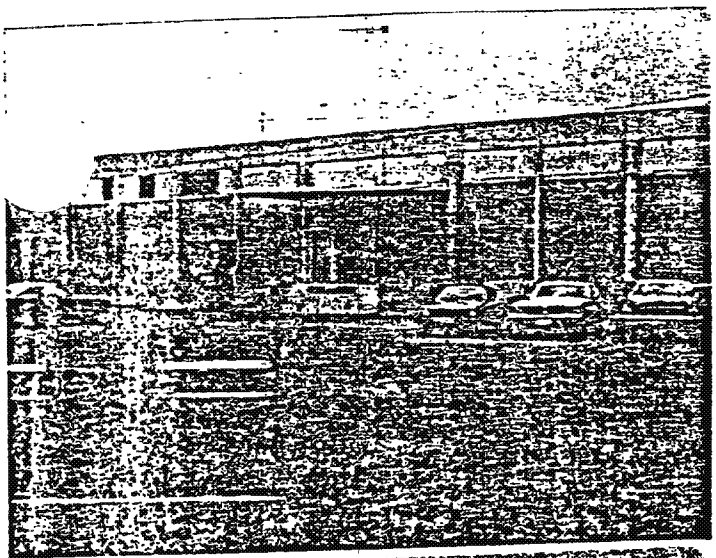
SK&F LAB CO
CAROLINA, P. R.



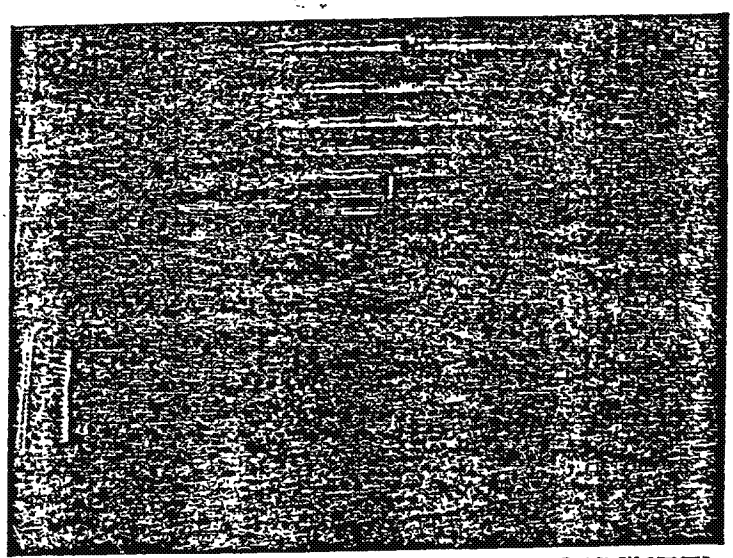
PH- 2 - SK&F LAB CO.
BACKYARD AREA
SO 2



PH - 1 - SK&F LAB CO.
CHEMICAL MANUFACTURING AREA
TO 4

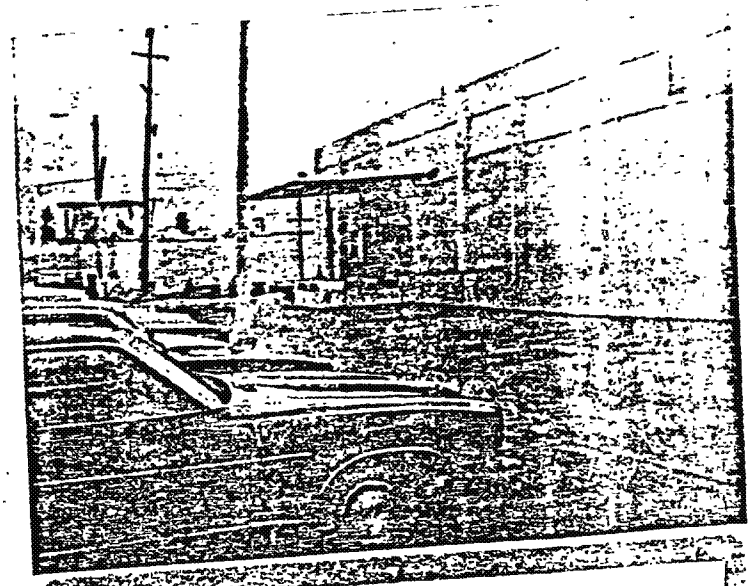


PH - 4 - SK&F LAB CO.
FINISHED GOOD SHIPPING DOCK

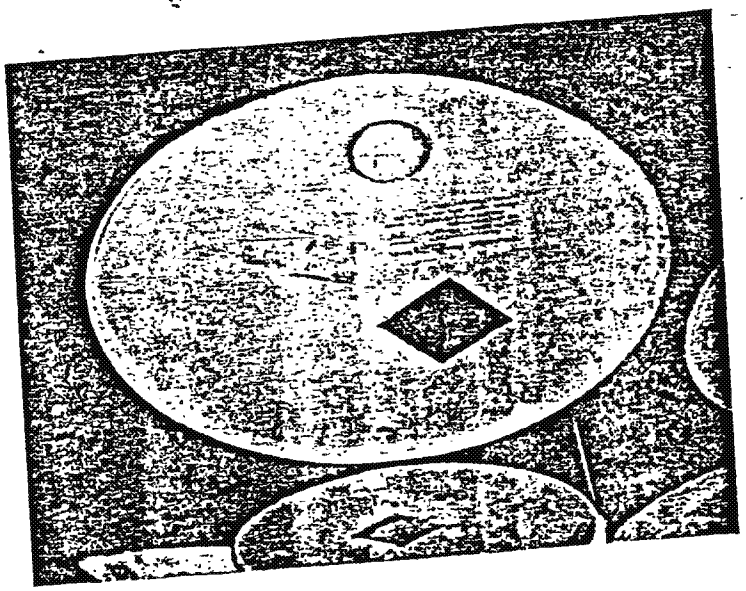


PH - 3 -SK&F LAB CO.
CONTAINER STORAGE TRAILER
SO 1

PH - 6 - SK&F LAB CO.
FRONT VIEW OF MAIN FACILITIES



PH - 5 -SK&F LAB CO.
RECEIVING DOCK



SK&F LAB CO.
P.O. Box 3930, Carolina, Puerto Rico 00630

March 18, 1981

Mr. Juan Merced
Environmental Quality Board
P. O. Box 11488
Santurce, Puerto Rico 00910

Dear Mr. Merced:

Re: SK&F Lab. Co. - Carolina, Puerto Rico
Package of Emission Sources Operation Permit Application

Herewith we are forwarding duly signed and notarized "Application for Approval for the Operation of Emission Sources in Puerto Rico" for all emission sources at our Carolina Facilities.

Please make all necessary arrangements to place our permits applications into the proper schedule.

In case you may have any doubt, do not hesitate to contact me.

Very truly yours,

SK&F LAB. CO.

Carlos A. Acevedo

Carlos A. Acevedo, Manager
Safety & Environmental Engineering

CAC/sfr

Enclosures

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

Environmental Quality Board

FEE FORM

Date March 18, 1980

Application Number _____

Name of Applicant Carlos A. Acevedo

Title Environmental Engineering Manager

Name of Project or Emission Source SK&F Lab Co - Carolina

Postal Address P. O. Box 3930

Carolina, P.R. 00630

1. Filin Fee	($15.00)		$15.00 *
2. Permit Fee			
A. Motor Horse Power	(see back)	1300 HP	$440.00
B. Fuel Burning Equipment	" "	13,553,000 BTU/HR	$110.00
C. Electrical Energy	" "	480 KVA	80.00
D. Incinerator	" "		
E. Stationary Container	" "		
3. Mayor Sources of Modification (1.5 amount determined from sect. A to E)			
4. Miscellaneous	($25.00)		
5. Renewal Fee			
A. Minor Sources	(50% of permit fee)		$220.00*
B. Mayor Sources	(65% of permit fee)		
6. Permit Fee Exeptions	($25.00)		
7. Transfer of Ownership or Change of Location Fee	(50% of permit fee)		
8. Revision Fee	(1/8 of permit fee)		
9. Duplicate Permits or Approval	($10.00)		
		TOTAL	$235.00

PARA USO DE LA JCA

Recibido en Programa Calidad de Aire: _____

Cotejado por: _____

Cantidad: _____ Valor recibido:

☐ Cheque

☐ Giro

Recibido en División de Finanzas: _____

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

Environmental Quality Board

OFFICE OF THE BOARD: 1550 PONCE DE LEON AVENUE, 4th FLOOR / MAILING ADDRESS: P.O. BOX 1488 SANTURCE, PUERTO RICO 00910 / TELEPHONE

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART I - GENERAL INFORMATION

[ ] Original [XX] Revision No. _____ (Check one) Date _____

1. Applicant

A. Name of project or emission source: Smith Kline and French Lab Co. (Carolina)

B. Location: Ceramica Annex, Carolina, Puerto Rico

C. Authorized representative for permit application coordination and correspondence: Smith Kline and French Lab Co. (Organization)

Engr. Carlos Acevedo (Name of Official) — Safety & Environmental Engineering Manager (Title) — 768-1570 (Tel No)

D. Postal address: 3930 (P. O. Box No.) Carolina (Municipality) 00630 (ZIP Code)

2. Purpose of application: [ ] Construction [XX] Operation (Check one)

3. Nature of business: Pharmaceutical Mfg.

4. No. of employees at site _____

5. Annual production (any convenient unit) _____

6. Itinerary of normal operations:

24 hrs./day 5 days/wk. 12 mos./yr.

7. If intermittent operation, frequency _____

8. Attach the following documents

A. Location map of plant site (projected or existing) indicating neighboring fields and prominent points or structures.

B. Layout plan of all facilities (projected or existing) indicating clearly all emission sources.

C. Plans and specification of the emission source and its control measures or equipment.

D. Information about any air sampling or monitoring equipment used, intended to be used or owned by applicant, including type, trade mark, method, operation schedule, etc

9. List all approvals or denials granted by Federal, State or Local agencies for any structure, construction, permit for use or requested number, and sanitary permit

Type of Permit	Issuing Agency	Identification No.	Date

10. Did facility exist, or was it lawfully under construction prior to September 16, 1971?

[ ] Yes [XX] No (Check one)

CERTIFICATION

Application is hereby made for a permit or permits to authorize the activities described herein. I certify that, to the best of my knowledge and belief, such information is true, complete and accurate.

Carlos Acevedo
Signature of applicant

A F F I D A V I T

Affidavit No 9345

Sworn and suscribed before me by Carlos Acevedo responsible official

of S.K.F. Lab. Co. of legal age, civil status married

and resident of Bayamón, Puerto Rico

In Carolina, Puerto Rico, this 27th. day of March 1981.

_____
Notary Public

FOR EQB USE ONLY

Permit issued on _____ Expires on _____ Application Number _____

GSK-PROTECO_000027

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

MAILING ADDRESS P.O. BOX 11488 SANTURCE, PUERTO RICO 00910 / TELEPHONE

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

Environmental Quality Board

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION C-2

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.
Cimetidine Powder (ulcer treatment compound) is mixed with edible non-drug material needed for compaction, then pressed. During compression about 15 kilos/day is lost.

2. Raw material used or processed: Tagamet (Type) 2090 (Quantity) kilos/day (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
Torit #1 & 2	98.5
Baghouse	

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
27.5 ft.	21X18 in.	75 °F	50.8 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 8000 cu. ft./min.

6. Emissions: Actual Estimated - Based on materials balance (estimated)

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Drug Powder	0.014 kilos / hr.	16 hrs./day

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: _____ (Type) _____ (BTU/hr.) or _____ (Horsepower)

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

II. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: _____ (Type) _____ (Trade Mark) _____ (Capacity) lbs/day

4. Chimney or stack: _____ ft. (Height) _____ in. (Exh. Diam.) _____ °F (Exh. Temp.) _____ ft/sec. (Exh. Vel.)

5. Auxiliary fuel: _____ (Type) _____ (Gals./hr.) or _____ (Lbs./hr.) _____ % Sulfur

6. Control equipment: _____ (Type) _____ (Efficiency) % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C 6959 (License Number) Carlos A. Acevedo (Name (Typed)) Carlos A. Acevedo (Signature)

Application Number _____

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR — MAILING ADDRESS: P.O. BOX 11488

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

Environmental Quality Board

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION C-2a

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.
Skerman Tablet Coating. Compressed 'Tagamet' powder is coated with edible hard setting substances. During the process dust is lost, about 6 kilos/day.

2. Raw material used or processed: Tagamet (Type) — 2508 (Quantity) — Kilos/day (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
Torit #3	98.5

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
50 ft.	12X12 in.	75 °F	43.3 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 2600 cu. ft./min.

6. Emissions: Actual Estimated - Based on material balance

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Drug Powder	0.00375 kilos/day	24 hrs/day

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: _____ (Type) — _____ (BTU/hr.) or _____ (Horsepower)

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: _____ (Type) — _____ (Trade Mark) — _____ (Capacity) lbs/day

4. Chimney or stack: _____ ft. (Height) — _____ in. (Exh. Diam.) — _____ °F (Exh. Temp.) — _____ ft/sec. (Exh. Vel.)

5. Auxiliary fuel: _____ (Type) — _____ (Gals./hr.) or _____ (Lbs./hr.) — _____ % Sulfur

6. Control equipment: _____ (Type) — _____ (Efficiency) % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C 6959 (License Number) — Carlos A. Acevedo (Name (Typed)) — Carlos A. Acevedo (Signature)

Date _____ Application Number _____

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

MAILING ADDRESS: P.O. BOX 11488 SANTURCE, PUERTO RICO 00910 / TELEPHONE

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION VC-2

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

During storage, handling and processing the powder mixtures are lost in small amounts. The powder scattered around the processing machines, the employees clothes and the floor. A vacuum cleaner system is available at those places to collect the scattered dust.

2. Raw material used or processed: _____ (Type) _____ (Quantity) _____ (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
Bag Filter #2	98%

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
27 ft.	6 in.	104 °F	8.5 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 800 cu. ft./min.

6. Emissions: Actual Estimated - Based on material balance (adjusted)

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Drug powder	0.002 kilos/hr.	24 hrs./day

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: _____ (Type) _____ (BTU/hr.) or _____ (Horsepower)

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____ lbs/day

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: _____ (Type) _____ (Trade Mark) _____ (Capacity)

4. Chimney or stack: _____ ft. (Height) _____ in. (Exh. Diam.) _____ °F (Exh. Temp.) _____ ft/sec. (Exh. Vel.)

_____ (ype) _____ (Gals./hr.) or _____ (Lbs./hr.) _____ (% Sulfur)

_____ (Type) _____ (Efficiency) % by wt.

formation showing that emissions will not exceed the established limits.

tch of any control equipment installation at the emission source.

ERTIFICATION BY AN ENGINEER OR A CHEMIST

authorized to practices my profession in Puerto Rico; that the equipment e emission are adequate and comply with the provisions of the Air Pollution tico Environmental Quality Board and that, to the best of my knowledge and rue, complete and accurate.

Carlos A. Acevedo (Name (Typed)) Carlos A. Acevedo (Signature)

Application Number

GSK-PROTECO_000030

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

MAILING ADDRESS. P.O. BOX SANTURCE, PUERTO RICO 00910 / TELEPHONE: 726-

11488

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR

OPERATION OF EMISSION SOURCES IN PUERTO RICO

Environmental Quality Board

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION DDFP-1 & 2

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

When electric power from PRWRA fails, this system enters into operation keeping desired pressure level on our fire protection sprinkler system.

2. Raw material used or processed: _____ (Type) _____ (Quantity) _____ (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: _____ cu. ft./min.

6. Emissions: Actual Estimated - Based on _____

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Detroit Diesel Fire Pump (Type) _____ (BTU/hr.) or 119 (Horsepower)

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur
Diesel	7		1.0

3. Control equipment for emissions:

Type	Efficiency % by wt.
Combusion	
Control Equipment	

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
25 ft.	4 in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: _____ (Type) _____ (Trade Mark) _____ (Capacity) lbs/day

4. Chimney or stack: _____ ft. (Height) _____ in. (Exh. Diam.) _____ °F (Exh. Temp.) _____ ft/sec. (Exh. Vel.)

5. Auxiliary fuel: _____ (Type) _____ (Gals./hr.) or _____ (Lbs./hr.) _____ (% Sulfur)

6. Control equipment: _____ (Type) _____ (Efficiency) % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C6959	Carlos A. Acevedo	Carlos A. Acevedo
License Number	Name (Typed)	Signature

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

MAILING ADDRESS: P.O. BOX 11488 SANTURCE, PUERTO RICO 00910 / TELEPHONE

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION CEG-1

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

2. Raw material used or processed: _____ (Type) _____ (Quantity) _____ (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
____ ft.	____ in.	____ °F	____ ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

5. Volume of discharge of emissions: _____ cu. ft./min.

6. Emissions: Actual Estimated - Based on _____

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Cummings Motor Generator (Type) -- (BTU/hr.) or 900 (Horsepower)

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur
Diesel	42		1.0

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
25 ft.	6 in.	950 °F	212 ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

I. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: _____ (Type) _____ (Trade Mark) _____ (Capacity) lbs/day

4. Chimney or stack: _____ ft. (Height) _____ in. (Exh. Diam.) _____ °F (Exh. Temp.) _____ ft/sec. (Exh. Vel.)

5. Auxiliary fuel: _____ (Type) _____ (Gals./hr.) or _____ (Lbs./hr.) _____ (% Sulfur)

6. Control equipment: _____ (Type) _____ (Efficiency) % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C6959 (License Number) Carlos A. Acevedo (Name (Typed)) Carlos A. Acevedo (Signature)

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

MAILING ADDRESS. P.O. BOX 11488 SANTURCE, PUERTO RICO 00910 / TELEPHO

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION OEG-1

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.
When electric power from PRWRA fails, this sytem enters into operation keeping vital sections of the plant powered.

2. Raw material used or processed: ____ (Type) ____ (Quantity) ____ (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
____ ft.	____ in.	____ °F	____ ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

5. Volume of discharge of emissions: ____ cu. ft./min.

6. Emissions: Actual Estimated - Based on ____

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: ONAN Electric Generating Plant (Type) ____ (BTU/hr.) or 160 (Horsepower)

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur
Diesel	7		1.0

3. Control equipment for emissions:

Type	Efficiency % by wt.
Combustion Control Equipment	

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
25 ft.	4 in.	____ °F	____ ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: ____

2. Wastes: Type ____ Quantity ____ lbs/day

3. Incinerator: ____ (Type) ____ (Trade Mark) ____ (Capacity) lbs/day

4. Chimney or stack: ____ ft. (Height) ____ in. (Exh. Diam.) ____ °F (Exh. Temp.) ____ ft/sec. (Exh. Vel.)

5. Auxiliary fuel: ____ (Type) ____ (Gals./hr.) or ____ (Lbs./hr.) ____ (% Sulfur)

6. Control equipment: ____ (Type) ____ (Efficiency) % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C6959 (License Number) Carlos A. Acevedo (Name (Typed)) Carlos A. Acevedo (Signature)

Section Number

GSK-PROTECO_000033

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

MAILING ADDRESS: P.O. BOX 11488 SANTURCE, PUERTO RICO 00910 / TELEPHONE

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION CBB-1, CBB-2

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

2. Raw material used or processed: _____ (Type) _____ (Quantity) _____ (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: _____ cu. ft./min.

6. Emissions: Actual Estimated - Based on _____

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: (2) C&B Boilers (Type) _____ (BTU/hr.) or 100 (Horsepower)

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur
Kerosene			0.7

3. Control equipment for emissions:

Type	Efficiency % by wt.
Combustion Control	

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
35 ft.	16 in.	350 °F	1.89 ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: _____ (Type) _____ (Trade Mark) _____ (Capacity) lbs/day

4. Chimney or stack: _____ ft. (Height) _____ in. (Exh. Diam.) _____ °F (Exh. Temp.) _____ ft/sec. (Exh. Vel.)

5. Auxiliary fuel: _____ (Type) _____ (Gals./hr.) or _____ (Lbs./hr.) _____ % Sulfur

6. Control equipment: _____ (Type) _____ (Efficiency) % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C6959 (License Number) Carlos A. Acevedo (Name (Typed)) Carlos A. Acevedo (Signature)

Application Number

GSK-PROTECO_000034

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

MAILING ADDRESS: P.O. BOX 11488 SANTURCE, PUERTO RICO 00910 / TELEPHONE

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION TC-1

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

Pharmaceutical Tablet Coating Process. Solvents are used to aid the coating process.

2. Raw material used or processed: Tagamet (Type) | 2508 (Quantity) | kilos/day (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
Carbon Absorption	97

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
50 ft.	12X12 in.	75 °F	43.3 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 2600 cu. ft./min.

6. Emissions: Actual Estimated - Based on Design efficiency

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Methylene Chloride	3.0 liters/day	8 hrs/day
SD 3A Alcohol	3.0 liters/day	8 hrs/day

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: _____ (Type) _____ BTU/hr. or _____ Horsepower

2. Fuel:

Type	Gals./hr. or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: Contracted off-site TSD facility.
2. Wastes: Type SD 3A Alcohol, Methylene Chloride, Quantity 671 lbs/day
3. Incinerator: Type None _____ Trade Mark _____ Capacity _____ lbs/day
4. Chimney or stack: _____ ft. Height _____ in. Exh. Diam. _____ °F Exh. Temp. _____ ft/sec. Exh. Vel.
5. Auxiliary fuel: Type None _____ Gals./hr. or _____ Lbs./hr. _____ % Sulfur
6. Control equipment: Type Carbon Absorption Efficiency 97% % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source. See attached Oxy-Catalyst Data

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C6959 (License Number) | Carlos A. Acevedo (Name (Typed)) | Carlos A. Acevedo (Signature)

Application Number

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

MAILING ADDRESS. P.O. BOX 11488 SANTURCE, PUERTO RICO 00910 / TELEPHONE

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION CBB-3

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

2. Raw material used or processed: _____ (Type) _____ (Quantity) _____ (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: _____ cu. ft./min.

6. Emissions: Actual Estimated - Based on _____

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Cleaver Brooks Boiler (Type) _____ (BTU/hr.) or 200 (Horsepower)

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur
Kerosene	60		0.7

3. Control equipment for emissions:

Type	Efficiency % by wt.
Combustion Control Equipment	

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
30 ft.	16 in.	350 °F	1.9 ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: _____ (Type) _____ (Trade Mark) _____ (Capacity) lbs/day

4. Chimney or stack: _____ ft. (Height) _____ in. (Exh. Diam.) _____ °F (Exh. Temp.) _____ ft/sec. (Exh. Vel.)

5. Auxiliary fuel: _____ (Type) _____ (Gals./hr.) or _____ (Lbs./hr.) _____ (% Sulfur)

6. Control equipment: _____ (Type) _____ (Efficiency) % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C6959 (License Number) Carlos A. Acevedo (Name (Typed)) Carlos A. Acevedo (Signature)

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

11488

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

Environmental Quality Board

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION PE

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.
Printing of brand name on capsules and tablets. Ink is butanol based.
Alcohol (isopropyl) and butanol are used for cleaning of equipment.

2. Raw material used or processed: Type ____ Quantity ____ Unit/Unit Time ____

3. Control equipment for emissions:

Type	Efficiency % by wt.
None	

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
27 ft.	8 in.	amb. °F	33 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 400 cu. ft./min.

6. Emissions: Actual Estimated - Based on Usage

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Ink Solvent 5% solution	4130 lbs/yr	20 hrs/week
.7893 g/ml.		

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Type ____ BTU/hr. ____ or Horsepower ____

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: ____

2. Wastes: Type ____ Quantity ____ lbs/day

3. Incinerator: Type ____ Trade Mark ____ Capacity ____ lbs/day

4. Chimney or stack: Height ____ ft. Exh. Diam. ____ in. Exh. Temp. ____ °F Exh. Vel. ____ ft/sec.

5. Auxiliary fuel: Type ____ Gals./hr. ____ or Lbs./hr. ____ % Sulfur ____

6. Control equipment: Type ____ Efficiency ____ % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

License Number	Name (Typed)	Signature
C6959	Carlos A. Acevedo	Carlos A. Acevedo

Application Number ____

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

11488

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

Environmental Quality Board

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION WE

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

Part washing equipment with extraction unit. Located at shop.

2. Raw material used or processed: Degreaser (Type) | 55 (Quantity) | gals/yr (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
None	

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
27 ft.	8 in.	amb. °F	33 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 400 cu. ft./min.

6. Emissions: Actual Estimated - Based on Degreaser losses

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Solvent	120 #/yr.	n/a

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: _____ (Type) _____ (BTU/hr.) or _____ (Horsepower)

2. Fuel:

Type	Gals./hr. or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: _____ (Type) _____ (Trade Mark) _____ (Capacity) lbs/day

4. Chimney or stack: _____ ft. (Height) _____ in. (Exh. Diam.) _____ °F (Exh. Temp.) _____ ft/sec. (Exh. Vel.)

5. Auxiliary fuel: _____ (Type) _____ (Gals./hr.) or _____ (Lbs./hr.) _____ (% Sulfur)

6. Control equipment: _____ (Type) _____ (Efficiency % by wt.)

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C6959 (License Number) | Carlos A. Acevedo (Name (Typed)) | Carlos A. Acevedo (Signature)

Date _____ Application Number _____

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

MAILING ADDRESS: P.O. BOX 11488 SANTURCE, PUERTO RICO 00910 / TELEPHONE: 725-

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION T-1 & 2

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

Weighing, Mixing, containers filling, etc. During handling powder is released. About 18 kilos/day loss.

2. Raw material used or processed: Tagamet (Type) 2508 (Quantity) kilos/day (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
(2) Torit #4 & #5 Dust Collectors	98.5

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
21 ft.	18X18 in.	75 °F	172 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 24,511 cu. ft./min.

6. Emissions: Actual Estimated - Based on Material balance

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Drug Powder	0.0169 kilos/day	16 hrs/day

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Type ____ BTU/hr. ____ or Horsepower ____

2. Fuel:

Type	Gals./hr. or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

I. Emissions from incineration or waste disposal

1. Method for disposal of wastes: ____

2. Wastes: Type ____ Quantity ____ lbs/day

3. Incinerator: Type ____ Trade Mark ____ Capacity ____ lbs/day

4. Chimney or stack: Height ____ ft. Exh. Diam. ____ in. Exh. Temp. ____ °F Exh. Vel. ____ ft/sec.

5. Auxiliary fuel: Type ____ Gals./hr. ____ or Lbs./hr. ____ % Sulfur ____

6. Control equipment: Type ____ Efficiency ____ % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C 6959 (License Number)

Carlos A. Acevedo (Name (Typed))

Carlos A. Acevedo (Signature)

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

MAILING ADDRESS: P.O. BOX 11488 SANTURCE, PUERTO RICO 00910

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION C-1

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.
Accela Cotta Tablet Coating. Compressed 'Tagamet' powder (ulcer treatment compound) is coated with edible hard setting substance. During the process dust is exhausted, about five kilos per day.

2. Raw material used or processed: Tagamet (Type) | 2090 (Quantity) | kilos/day (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
Torit dust Collector #6	98.5

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
33 ft.	22X19 in.	75 °F	68.9 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 12,000 cu. ft./min.

6. Emissions: Actual Estimated - Based on Mass balance (projected)

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Drug powder	0.0047	16 hrs./day

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: _____ (Type) _____ BTU/hr. or _____ Horsepower

2. Fuel:

Type	Gals./hr. or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____
2. Wastes: Type _____ Quantity _____ lbs/day
3. Incinerator: _____ (Type) _____ (Trade Mark) _____ (Capacity) lbs/day
4. Chimney or stack: _____ ft. (Height) _____ in. (Exh. Diam.) _____ °F (Exh. Temp.) _____ ft/sec. (Exh. Vel.)
5. Auxiliary fuel: _____ (Type) _____ (Gals./hr.) or _____ (Lbs./hr.) _____ % Sulfur
6. Control equipment: _____ (Type) _____ (Efficiency) % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C 6959 (License Number) | Carlos A. Acevedo (Name (Typed)) | Carlos A. Acevedo (Signature)

Application Number

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE

11488

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR

OPERATION OF EMISSION SOURCES IN PUERTO RICO

Environmental Quality Board

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION G-1 & 2

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

Glatts 1 & 2: Tagamet powder's are mixed, granulated and dryed on an air suspension chamber. Air pass through the chamber and then through a built-in bag house - 3.3 kilos /day loss

2. Raw material used or processed: Tagamet (Type) | 2508 (Quantity) | kilos/day (Unit/Unit Time)

3. Control equipment for emissions:

	Type	Efficiency % by wt.
(2)	Filter bag	80.0

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
31 ft.	18 in.	104 °F	16.6 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 4700.0 cu. ft./min.

6. Emissions: Actual Estimated - Based on Material Balance

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Drug Powder	0.04 kilos/hr.	16 hrs. / day

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Type | BTU/hr. or Horsepower

2. Fuel:

Type	Gals./hr. or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes:

2. Wastes: Type | Quantity lbs/day

3. Incinerator: Type | Trade Mark | Capacity lbs/day

4. Chimney or stack: Height ft. | Exh. Diam. in. | Exh. Temp. °F | Exh. Vel. ft/sec.

5. Auxiliary fuel: Type | Gals./hr. or Lbs./hr. | % Sulfur

6. Control equipment: Type | Efficiency % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C 6959 (License Number) | Carlos A. Acevedo (Name (Typed)) | Carlos A. Acevedo (Signature)

Date

Application Number

GSK-PROTECO_000041

Environmental Quality Board

11488

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION VC-1

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.
During storage, handling and processing, the powder mixtures are lost in small amounts. The powder scattered around the processing machines, the employees clothes and the floor. A vacuum cleaner system is available at those places to collect the scattered dust.

2. Raw material used or processed: Type ____ Quantity ____ Unit/Unit Time ____

3. Control equipment for emissions:

Type	Efficiency % by wt.
Bag Filter	98.5

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
20.5 ft.	8 in.	104 °F	11.9 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 1500 cu. ft./min.

6. Emissions: Actual Estimated - Based on material balance (adjusted)

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Drug Powder	0.030 kilos/hr.	24 hrs.

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Type ____ BTU/hr. ____ or Horsepower ____

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: ____

2. Wastes: Type ____ Quantity ____ lbs/day

3. Incinerator: Type ____ Trade Mark ____ Capacity ____ lbs/day

4. Chimney or stack: Height ____ ft. Exh. Diam. ____ in. Exh. Temp. ____ °F Exh. Vel. ____ ft/sec.

5. Auxiliary fuel: Type ____ Gals./hr. ____ or Lbs./hr. ____ % Sulfur ____

6. Control equipment: Type ____ Efficiency ____ % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C 6959 (License Number) | Carlos A. Acevedo (Name (Typed)) | Carlos A. Acevedo (Signature)

Date ____ Application Number ____

SK&F LAB CO.
P.O. Box 3930, Carolina, Puerto Rico 00630

November 28, 1979

Mr. Juan Merced
Environmental Quality Board
P. O. Box 11488
Santurce, Puerto Rico 00910

Dear Mr. Merced:

RE: SK&F LAB CO. - Carolina, Puerto Rico
Package of Emission Sources Operation Permit Application

Herewith we are forwarding duly signed and notarized "Application for Approval for the Operation of Emission Sources in Puerto Rico for all emission sources at our Carolina facilities.

We are also including a copy of EQB Air Pollutant Emission Summary Report.

Please make all necessary arrangements to place our permits applications into the proper schedule.

In case you may have any doubt, do not hesitate to contact me.

Very truly yours,

SK&F LAB CO.

Carlos A. Acevedo
Staff Engineer

zr
Enclosures

ESTADO LIBRE ASOCIADO DE PUERTO RICO / OFICINA DEL GOBERNADOR

Junta de Calidad Ambiental

10 de diciembre de 1979

PFE- 1279-0978-I-II-O
SMITH, LINE AND FRENCH
LAB. CO. CAROLINA

Fecha de
Recibo: 5 diciembre 1979

Ing. Carlos Acevedo
P.O. Box 1983
Carolina, Puerto Rico

Estimadosseñor Acevedo:

Su "Solicitud para Aprobación para Construcción u Operación de Fuentes de Emisión en Puerto Rico" fue recibida en la fecha arriba indicada y se le ha asignado la codificación que también aparece en el epígrafe.

Agradeceremos que en cualquier ocasión futura en que le fuere a usted necesario comunicarse con esta Junta tenga la bondad de utilizar dicha codificación.

Informaremos a usted sobre la decisión tomada en este caso tan pronto como nos sea posible.

Atentamente,

Amelia Marrero Ginés
Jefe, División de
Radicaciones y Querellas

Velando por la pureza ... que le rodea.
Oficina de la Junta: Calle del Parque Núm. ...

GSK-PROTECO_000044

00910

COMMONWEALTH OF PUERTO RICO — OFFICE OF THE GOVERNOR

Environmental Quality Board

OFFICE OF THE BOARD: 204 DEL PARQUE ST. - ESQ. PUMARADA
SANTURCE, PUERTO RICO 00911

APPLICATION FOR APPROVAL FOR THE ~~CONSTRUCTION OR~~ OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART I - GENERAL INFORMATION

☐ Original ☒ XX Revision No. _____ (Check one) Date _____

1. Applicant

A. Name of project or emission source: Smith, Kline and French Lab.Co.(Carolina)

B. Location: Cerámica Annex. Carolina. Puerto Rico

C. Authorized representative for permit application coordination and correspondence: Smith, Kline and French Lab. Co. (Organization)

Eng. Carlos Acevedo (Name of Official) — Staff Engineer (Tittle) — 768-1570, 739-8401 (Tel. No.)

D. Postal address: 1983 (P. O. Box No.) Carolina (Municipality) 00630 (ZIP Code)

2. Purpose of application: ☐ Construction ☒ X Operation (Check one)

3. Nature of business: Pharmaceutical Mfg.

4. No. of employees at site: _____

5. Annual production (any convenient unit) _____

6. Itinerary of normal operations: 16 hrs./day 5 days/wk. 12 mos./yr.

7. If intermittent operation, frequency _____

8. Attach the following documents:

A. Location map of plant site (projected or existing) indicating neighboring fields and prominent points or structures.

B. Layout plan of all facilities (projected or existing) indicating clearly all emission sources.

C. Plans and specification of the emission source and its control measures or equipment.

D. Information about any air sampling or monitoring equipment used, intended to be used or owned by applicant, including type, trade mark, method, operation schedule,etc.

9. List all approvals or denials granted by Federal, State or Local agencies for any structure, construction, permit for use or requested number, and sanitary permit:

Type of Permit	Issuing Agency	Identification No.	Date

10. Did facility exist, or was it lawfully under construction prior to September 16, 1971?

☐ Yes ☒ X No (Check one)

CERTIFICATION

Application is hereby made for a permit or permits to authorize the activities described herein. I certify that, to the best of my knowledge and belief, such information is true, complete and accurate.

_____
Signature of applicant

A F F I D A V I T

Affidavit No. _____

Sworn and suscribed before me by _____ responsible official of _____ of legal age, civil status _____ and resident of _____.

In _____, Puerto Rico, this _____ day of _____ 197__.

_____
Notary Public

FOR EQB USE ONLY

Permit issued on _____ Expires on _____ Application Number _____

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR — MAILING ADDRESS: P.O. BOX 488, SANTURCE, PUERTO RICO 00910 / TELEPHONE 725-8150

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION DDFP-1 & 2

I. Industrial Emissions

1. Describe process of operation that emits atmospheric contaminants.
When electric power from PRWRA fails, this system enters into operation keeping desired pressure level on our fire protection sprinkler system.

2. Raw material used or processed: _____ (Type) _____ (Quantity) _____ (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: _____ cu. ft./min.

6. Emissions: Actual Estimated - Based on _____

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Detroit Diesel Fire Pump [2] (Type) _____ BTU/hr. or 119 Horsepower

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur
Diesel	7		0.7

3. Control equipment for emissions:

Type	Efficiency % by wt.
Combusion Control Equipment	

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
12 ft.	4 in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: _____ (Type) _____ (Trade Mark) _____ (Capacity) lbs/day

4. Chimney or stack: _____ ft. (Height) _____ in. (Exh. Diam.) _____ °F (Exh. Temp.) _____ ft/sec. (Exh. Vel.)

5. Auxiliary fuel: _____ (Type) _____ (Gals./hr.) or _____ (Lbs./hr.) _____ % Sulfur

6. Control equipment: _____ (Type) _____ (Efficiency) % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

c 6959 (License Number) — Carlos A. Acevedo (Name (Typed)) — _____ (Signature)

Date _____ Application Number _____

COMMONWEALTH OF PUERTO RICO / O FIC THE GOVERNOR MAILING ADDRESS: P.O. 488 BAYAMON, PUERTO RICO 00619 / TELEPHONE 725-8140

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION CEG-1

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

2. Raw material used or processed: Type ____ Quantity ____ Unit/Unit Time ____

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
____ ft.	____ in.	____ °F	____ ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

5. Volume of discharge of emissions: ____ cu. ft./min.

6. Emissions: Actual Estimated - Based on ____

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Cummings Motor Generator (Type) ____ (BTU/hr.) or 900 (Horsepower)

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur
Diesel	42		0.7

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
15 ft.	6 in.	950 °F	212 ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: ____

2. Wastes: Type ____ Quantity ____ lbs/day

3. Incinerator: Type ____ Trade Mark ____ Capacity ____ lbs/day

4. Chimney or stack: Height ____ ft. Exh. Diam. ____ in. Exh. Temp. ____ °F Exh. Vel. ____ ft/sec.

5. Auxiliary fuel: Type ____ Gals./hr. ____ or Lbs./hr. ____ % Sulfur ____

6. Control equipment: Type ____ Efficiency ____ % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

6-6959 (License Number) Carlos A. Acevedo (Name (Typed)) ____ (Signature)

Date ____ Application Number ____

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR — MAILING ADDRESS: P.O. BOX 488, SAN JUAN, PUERTO RICO 00910 / TELEPHONE: 725-5140

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION OEG-1

I. Industrial Emissions

1. Describe process of operation that emits atmospheric contaminants.
When electric power from PRWRA fails, this system enters into operation keeping vital sections of the plant powered.

2. Raw material used or processed: Type _____ Quantity _____ Unit/Unit Time _____

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: _____ cu. ft./min.

6. Emissions: Actual Estimated - Based on _____

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Type ONAN Electric Generating Plant _____ BTU/hr. or 160 Horsepower

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur
Diesel	7		0.7

3. Control equipment for emissions:

Type	Efficiency % by wt.
Combustion Control Equipment	

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
12 ft.	4 in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____ lbs/day
2. Wastes: Type _____ Quantity _____ lbs/day
3. Incinerator: Type _____ Trade Mark _____ Capacity _____
4. Chimney or stack: Height _____ ft. Exh. Diam. _____ in. Exh. Temp. _____ °F Exh. Vel. _____ ft/sec.
5. Auxiliary fuel: Type _____ Gals./hr. _____ or Lbs./hr. _____ % Sulfur _____
6. Control equipment: Type _____ Efficiency _____ % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C-6959 (License Number) — Carlos A. Acevedo (Name (Typed)) — _____ (Signature)

Date _____ Application Number _____

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR — MAILING ADDRESS: P.O. BOX 11488, SANTURCE, PUERTO RICO 00910 / TELEPHONE: 725-8140

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION CBB-1, CBB-2

I. Industrial Emissions

1. Describe process of operation that emits atmospheric contaminants.

2. Raw material used or processed: Type _____ Quantity _____ Unit/Unit Time _____

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
____ ft.	____ in.	____ °F	____ ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

5. Volume of discharge of emissions: _____ cu. ft./min.

6. Emissions: Actual Estimated - Based on _____

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Type (2) CSB Boilers _____ BTU/hr. or 100 Horsepower

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.
Combustion Control	

4. Chimneys or stacks: (one for the 2 boilers)

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
53 ft.	16 in.	350 °F	1.89 ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: Type _____ Trade Mark _____ Capacity _____ lbs/day

4. Chimney or stack: Height _____ ft. Exh. Diam. _____ in. Exh. Temp. _____ °F Exh. Vel. _____ ft/sec.

5. Auxiliary fuel: Type _____ Gals./hr. _____ or Lbs./hr. _____ % Sulfur _____

6. Control equipment: Type _____ Efficiency _____ % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C-6959 (License Number) — Carlos A. Acevedo (Name (Typed)) — _____ (Signature)

Date _____ Application Number _____

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR — MAILING ADDRESS: P.O. BOX — BAYAMON, PUERTO RICO 00619 / TELEPHONE 798-8180

Environmental Quality Board

488

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION CBB-3

I. Industrial Emissions

1. Describe process of operation that emits atmospheric contaminants.

2. Raw material used or processed: Type ____ Quantity ____ Unit/Unit Time ____

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
____ ft.	____ in.	____ °F	____ ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

5. Volume of discharge of emissions: ____ cu. ft./min.

6. Emissions: Actual Estimated - Based on ____

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Cleaver Brooks Boiler (Type) ____ BTU/hr. or 200 Horsepower

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur
Kerosene	60		0.7

3. Control equipment for emissions:

Type	Efficiency % by wt.
Combustion Control Equipment	

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
50 ft.	16 in.	350 °F	1.9 ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: ____

2. Wastes: Type ____ Quantity ____ lbs/day

3. Incinerator: Type ____ Trade Mark ____ Capacity ____ lbs/day

4. Chimney or stack: Height ____ ft. Exh. Diam. ____ in. Exh. Temp. ____ °F Exh. Vel. ____ ft/sec.

5. Auxiliary fuel: Type ____ Gals./hr. ____ or Lbs./hr. ____ % Sulfur ____

6. Control equipment: Type ____ Efficiency ____ % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C-6959 (License Number) — Carlos A. Acevedo (Name (Typed)) — ____ (Signature)

Date ____ Application Number ____

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR — MAILING ADDRESS: P.O. BOX 1488, SAN JUAN, PUERTO RICO 00902

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION C-1

I. Industrial Emissions

1. Describe process of operation that emits atmospheric contaminants.
New Tablet Manufacturing Process. Compressed 'Tagamet' powder (ulcer treatment compound) is coated with edible hard setting substance. During the process dust is exhausted, about one percent of total weight.

2. Raw material used or processed: Cimetidine (Type) — 1500 (Quantity) — Kilos/day (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
Torit dust	99.9

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
25 ft.	22x19 in.	140 °F	5,000 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 15,000 cu. ft./min.

6. Emissions: Actual Estimated - Based on Mass Balance (projected)

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Table Dust	0.000125 kilos/hr.	16 hrs/day

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Type — BTU/hr. or Horsepower

2. Fuel:

Type	Gals./hr. or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes:
2. Wastes: Type — Quantity lbs/day
3. Incinerator: Type — Trade Mark — Capacity lbs/day
4. Chimney or stack: Height ft. — Exh. Diam. in. — Exh. Temp. °F — Exh. Vel. ft/sec.
5. Auxiliary fuel: Type — Gals./hr. or Lbs./hr. — % Sulfur
6. Control equipment: Type — Efficiency % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C-6959 (License Number) — Carlos A. Acevedo (Name (Typed)) — Signature

Date

Application Number

APPLICATION FOR APPL FOR THE CONSTRUCTION

OPERATION OF EMISSION SOURCES IN PUERTO RICO

Environmental Quality Board

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION

PE

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

Printing of brand name on capsules and tablets. Ink is butanol based.

Alcohol(isopropil)and butanol are used for cleaning of equipment.

2. Raw material used or processed: Type _____ Quantity _____ Unit/Unit Time _____

3. Control equipment for emissions:

Type	Efficiency % by wt.
none	

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
27 ft.	8 in.	amb. °F	33 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 400 cu. ft./min.

6. Emissions: Actual ~~Estimated~~ - Based on Usage

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Ink Solvent 5 % solution .7893 g/ml.	4130 lbs/yr	20 hrs/week

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Type _____ BTU/hr. _____ or Horsepower _____

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: Type _____ Trade Mark _____ Capacity _____ lbs/day

4. Chimney or stack: Height _____ ft. Exh. Diam. _____ in. Exh. Temp. _____ °F Exh. Vel. _____ ft/sec.

5. Auxiliary fuel: Type _____ Gals./hr. _____ or Lbs./hr. _____ % Sulfur _____

6. Control equipment: Type _____ Efficiency _____ % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C 6959 — License Number

Carlos A. Acevedo — Name (Typed)

_____ — Signature

Date _____

Application Number _____

COMMONWEALTH OF PUERTO RICO

Environmental Quality Board

APPLICATION FOR APPR[illegible] FOR THE [illegible]

OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION

WE

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

Part washing equipment with extraction unit.Located at shop.

2. Raw material used or processed: Degreaser (Type) | 55 (Quantity) | gals/yr (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
none	

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
27 ft.	8 in.	amb. °F	33 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 400 cu. ft./min.

6. Emissions: Actual Estimated - Based on Degreaser losses

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
solvent	120 #/yr	n/a

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Type | BTU/hr. or Horsepower

2. Fuel:

Type	Gals./hr. or	Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes:

2. Wastes: Type | Quantity lbs/day

3. Incinerator: Type | Trade Mark | Capacity lbs/day

4. Chimney or stack: Height ft. | Exh. Diam. in. | Exh. Temp. °F | Exh. Vel. ft/sec.

5. Auxiliary fuel: Type | Gals./hr. or Lbs./hr. | % Sulfur

6. Control equipment: Type | Efficiency % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C 6959 (License Number) | Carlos A. Acevedo (Name (Typed)) | Signature

Date

Application Number

APPLICATION FOR APPR[illegible] FOR THE CONSTRUCTION OR

OPERATION OF EMISSION SOURCES IN [illegible]ERTO RICO

Environmental Quality Board

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION VC-1

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

During storage, handling and processing, the powder mixtures are lost in small amounts. The powder scattered around the processing machines, the employees clothes and the floor. A vacuum cleaner system is avalable at those places to collect the scattered dust.

2. Raw material used or processed: _____ (Type) _____ (Quantity) _____ (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
Bag filter	98%

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
64 ft.	8 1/2 in.	ambient °F	107.84 ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

5. Volume of discharge of emissions: 2200 cu. ft./min.

6. Emissions: Actual Estimated - Based on material balance (adjusted)

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Drug Powder	6.5×10^{-2} #/hr.	

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: _____ (Type) _____ (BTU/hr.) or _____ (Horsepower)

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
____ ft.	____ in.	____ °F	____ ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: _____ (Type) _____ (Trade Mark) _____ (Capacity) lbs/day

4. Chimney or stack: _____ ft. (Height) _____ in. (Exh. Diam.) _____ °F (Exh. Temp.) _____ ft/sec. (Exh. Vel.)

5. Auxiliary fuel: _____ (Type) _____ (Gals./hr.) or _____ (Lbs./hr.) _____ (% Sulfur)

6. Control equipment: _____ (Type) _____ (Efficiency) % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C6959 (License Number) Carlos A. Acevedo (Name (Typed)) _____ (Signature)

Date _____ Application Number _____

COMMONWEALTH OF PUERTO RICO / OFF... OF ...

APPLICATION FOR APPRO... FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

Environmental Quality Board

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION VC-2

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

During storage, handling and processing the powder mixtures are lost in small amounts. The powder scattered around the processing machines, the employees clothes and the floor. A vacuum cleaner system is available at those places to collect the scattered dust.

2. Raw material used or processed: Collected dust (Type) | 0.22 #/hr. (Quantity) | (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
Bag filter	98%

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
18 ft.	6 in.	amb. °F	93.3 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 1100 cu. ft./min.

6. Emissions: Actual Estimated - Based on Materials balance (Adjusted).

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Drug Powder	4.42×10^{-3} #/hr.	16 hrs./day

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Type | BTU/hr. or Horsepower

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes:
2. Wastes: Type | Quantity lbs/day
3. Incinerator: Type | Trade Mark | Capacity lbs/day
4. Chimney or stack: Height ft. | Exh. Diam. in. | Exh. Temp. °F | Exh. Vel. ft/sec.
5. Auxiliary fuel: Type | Gals./hr. or Lbs./hr. | % Sulfur
6. Control equipment: Type | Efficiency % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C 6959 (License Number) | Carlos A. Acevedo (Name (Typed)) | Signature

Date | Application Number

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION TC-1

I Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.
Pharmaceutical Tablet Coating Exhaust

2. Raw material used or processed: See Attached List (Type) ____ (Quantity) ____ (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
Carbon Absorption	97

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
15 ft.	10 in.	95° °F	92 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 3000 cu. ft./min.

6. Emissions: Actual Estimated - Based on 8 hour shift

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Methylene Chloride	3.0 liters / day	8 hours / day
SD 30 Alcohol	3.0 liters / day	8 hours / day

7. Attach process flow diagram (block type) showing points, amounts and types of emissions. See Attachment.

II. Emissions from combustion

1. Combustion equipment: ____ (Type) ____ (ETU/hr.) or ____ (Horsepower)

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from ~~incineration~~ or waste disposal

1. Method for disposal of wastes: Recycled in Process or recovery
2. Wastes: Type Methylene Chloride, SD30 Alcohol Quantity 671 lbs/day
3. Incinerator: None (Type) ____ (Trade Mark) ____ (Capacity) lbs/day
4. Chimney or stack: ____ ft. (Height) ____ in. (Exh. Diam.) ____ °F (Exh. Temp.) ____ ft/sec. (Exh. Vel.)
5. Auxiliary fuel: None (Type) ____ (Gals /hr.) or ____ (Lbs./hr.) ____ % Sulfur
6. Control equipment: Carbon Absorption (Type) 97 (Efficiency) % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits

V. Control Equipment: Attach sketch of any control equipment installation at the emission source See Attached Oxy-Catalyst Data

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C 6959 (License Number) Carlos A. Acevedo (Name (Typed)) ____ (Signature)

Date ____ Application Number ____

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE ...

APPLICATION FOR APPROV... FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

Environmental Quality Board

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION G-1 & 2

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

See attached.

2. Raw material used or processed: Cimetidine (Type) | 400 kilos (Quantity) | 4 hrs./day (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
Filter bag two-(Glatt)	See attached letter from Glatt

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
28 ft.	8 in.	104 °F	225 ft/sec.
ft.	in.	°F	ft/sec.

5. Volume of discharge of emissions: 4700.00 cu. ft./min.

6. Emissions: Actual Estimated - Based on

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Dust	1.45 lbs./day or 0.36 lbs/hr.	4 hrs./day
See attached Arnold Greene's Report - Sample B		

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: Type | BTU/hr. or Horsepower

2. Fuel:

Type	Gals./hr. or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
ft.	in.	°F	ft/sec.
ft.	in.	°F	ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: Quantity lbs/day

2. Wastes: Type Capacity lbs/day

3. Incinerator: Type | Trade Mark

4. Chimney or stack: Height ft. | Exh. Diam. in. | Exh. Temp. °F | Exh. Vel. ft/sec.

5. Auxiliary fuel: Type | Gals./hr. or Lbs./hr. | % Sulfur

6. Control equipment: Type | Efficiency % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C 6959 (License Number) | Carlos A. Acevedo (Name (Typed)) | Signature

Application Number

Date

I Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

Cimetidine, an ulcer treatment compound, is submitted to the process described below:

The Glatt WSG 300 Fluid Bed Granulator, oprates on an air fluidization and liquid spray principal. As such, it can accomplish the operations of mixing, granulating and drying. It consists essentially, of a product filter housing, an expansion chamber and a product container. Its operation is as follows:

Outside air enters through prefilters (80u), heating coils and Hepa filters (0.3u). The filtered air then passes through a 100 mesh screen, located at the bottom of the product container and into the product container where it comes in contact with the product, causing the powder to fluidize. The product filter (5u), located at the top of the expansion chamber, retains the product while allowing the air to pass through to an outlet flap and into the atmosphere. By means of a liquid spray nozzle located in the expansion chamber, the product may be granulated with a suitable solution at some predetermined time and then dried. It should be noted that the purpose of the product filter is soley to retain the powders in the Glatt units.

It is estimated that about 5% of the material processed will be in contact with the product filter (5u).

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION — C-2

I. Industrial Emissions

1. Describe the process of operation that emits atmospheric contaminants.

Cimetidine Powder [ulcer treatment compound] is mixed with edible non-drug material needed for compaction, then pressed.

2. Raw material used or processed: Collected dust (Type) — 5.0#/hr. (Quantity) — _____ (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
Torit	99.75
Baghouse	

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
22 ft.	19.5x18.5 in.	amb °F	62 ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

5. Volume of discharge of emissions: 9300 cu. ft./min.

6. Emissions: Actual — Estimated - Based on materials balance

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Cimetidine dust	1.25×10^{-2} #/hr.	16 hrs./day

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: _____ (Type) — _____ (BTU/hr.) or _____ (Horsepower)

2. Fuel:

Type	Gals./hr.	or Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
____ ft.	____ in.	____ °F	____ ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: _____ (Type) — _____ (Trade Mark) — _____ (Capacity) lbs/day

4. Chimney or stack: _____ ft. (Height) — _____ in. (Exh. Diam.) — _____ °F (Exh. Temp.) — _____ ft/sec. (Exh. Vel.)

5. Auxiliary fuel: _____ (Type) — _____ (Gals./hr.) or _____ (Lbs./hr.) — _____ (% Sulfur)

6. Control equipment: _____ (Type) — _____ (Efficiency % by wt.)

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C 6959 (License Number) — Carlos A. Acevedo (Name (Typed)) — _____ (Signature)

Date _____ Application Number _____

Environmental Quality Board

APPLICATION FOR APPROVAL FOR THE CONSTRUCTION OR OPERATION OF EMISSION SOURCES IN PUERTO RICO

PART II - PLANT PROCESS AND EMISSIONS DESCRIPTION T-1 & 2

'78 AUG 9 PM 3 0

I. Industrial Emissions

1. Describe process or operation that emits atmospheric contaminants.

Drug powder and dust is mixed with the air. The powder and dust are collected from the air.

2. Raw material used or processed: Drug Powder and dust (Type) | 0.65 #/hr. (Quantity) | _____ (Unit/Unit Time)

3. Control equipment for emissions:

Type	Efficiency % by wt.
(2) Torit Dust Collector	99.75

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
28 ft.	24x12 in.	amb. °F	50 ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

5. Volume of discharge of emissions: 6000 cu. ft./min.

6. Emissions: Actual Estimated - Based on materials balance

Type of Pollutant	Quantity (wt./unit time)	Duration (time/unit time)
Drug Powder	16.25×10^{-4} #/hr.	16 hrs./day

7. Attach process flow diagram (block type) showing points, amounts and types of emissions.

II. Emissions from combustion

1. Combustion equipment: _____ (Type) _____ (BTU/hr.) or _____ (Horsepower)

2. Fuel:

Type	Gals./hr. or	Lbs./hr.	% Sulfur

3. Control equipment for emissions:

Type	Efficiency % by wt.

4. Chimneys or stacks:

Height	Exhaust Diam.	Exhaust Temp.	Exhaust Veloc.
____ ft.	____ in.	____ °F	____ ft/sec.
____ ft.	____ in.	____ °F	____ ft/sec.

III. Emissions from incineration or waste disposal

1. Method for disposal of wastes: _____

2. Wastes: Type _____ Quantity _____ lbs/day

3. Incinerator: _____ (Type) _____ (Trade Mark) _____ (Capacity) lbs/day

4. Chimney or stack: _____ (Height) ft. _____ (Exh. Diam.) in. _____ (Exh. Temp.) °F _____ (Exh. Vel.) ft/sec.

5. Auxiliary fuel: _____ (Type) _____ (Gals./hr.) or _____ (Lbs./hr.) _____ (% Sulfur)

6. Control equipment: _____ (Type) _____ (Efficiency) % by wt.

IV. Compliance: Attach data or information showing that emissions will not exceed the established limits.

V. Control Equipment: Attach sketch of any control equipment installation at the emission source.

CERTIFICATION BY AN ENGINEER OR A CHEMIST

I Certify that I am registered and authorized to practices my profession in Puerto Rico; that the equipment and measures for the control of the emission are adequate and comply with the provisions of the Air Pollution Control regulations of the Puerto Rico Environmental Quality Board and that, to the best of my knowledge and belief, the above information is true, complete and accurate.

C6959 (License Number) | Carlos A. Acevedo (Name (Typed)) | Carlos A. Acevedo (Signature)

Date _____ Application Number _____

ENVIRONMENT. QUALITY BOARD
AIR POLLUTAN. EMISSION SUMMARY

SECTION I: GENERAL INFORMATION

Plant, institution, or establishment name: Smith, Kline and French Lab. Co. [Carolina]

Plant, institution, or establishment location: Cerámica Annex, Carolina, Puerto Rico

Person to contact regarding this report: Carlos A. Acevedo Title: Staff Engineer Tel: 768-1570 739-8401

Mailing address: P.O. Box 1983 (Street or Box Number) Carolina (City) Puerto Rico (State) 00630 (Zip)

Approximate number of employees at plant, institution, or establishment location: / / Less than 100 /XX/ 100 or more.

Elevation of plant, institution, or establishment in relationship to mean sea level: +/- 50 feet above mean sea level.

Information is representative of calendar year: 1978

Land area at plant location: _____ acres. Enclose a sketch of layout if there is more than one building.

Plant location: (give neares cross streets, describe by landmarks or enclose a map, engineering drawing, or sketch)

Bldg. # , Cerámica Annex [Industrial Park] Carolina, Puerto Rico

Air pollutants of the type indicated in the instructions for the completion of this report, i.e., N/A are not emitted at this plant, institution or establishment. Therefore, no other Sections of the report need by completed.

Carlos A. Acevedo (Signed) Staff Engineer (Title)

Please return all sections of this report to: Ing. Edgardo Sotto, Junat de Calidad Ambiental, Apartado 11488, Santurce, P.R. 00910 Indicate the last codification number assigned by the EQB to your Application for Approval for the Construction or Operation of Emission Sources in Puerto Rico: PFE _____.

Date Report Submitted: _____

GSK-PROTECO_000061

ENVIRONMENTAL QUALITY BOARD

AIR POLLUTANT EMISSIONS SUMMARY

SECTION II: FUEL COMBUSTION FOR GENERATION OF HEAT, STEAM, AND POWER

Plant, institution, or establishment name: Smith, Kline and French Lab. Co. [Carolina]

Normal operating schedule for fuel use: 16 Hours per day 5 Days per week 52 Weeks per year 4,160 Hours per year.

Dates of annually occurring shutdowns of operations: N/A. Additional operating information enclosed ☐.

Source[a,e] Code	Number of Combustion Sources[b,e] (Boilers)	Size of Unit (Input)[c,e] 10^6BTU/hr.	Type of Unit[d,e]	Installation Date[e]	Percent Excess Air Used In Combustion (Design)[e]	Power Output Megawatts[e,f]
CBB-1	1	100 HP	Fired Tube		40%	
CBB-2	1	100 HP	Fired Tube		40%	
CBB-3	1	200 HP	Fired Tube		40%	
OEG-1	1	160 HP	Onan Electric Generator		N/A	
CEG-1	1	900 HP	Cumming Electric Generator		N/A	
ODFP-1,2	2	119 HP	Detroit Diesel Fire Pump		N/A	

a. List a separate code number to represent each source (e.g., II-a, II-b, II-c, etc.), then enter the same code number and the required data on the continuation of this Section on Page 3, and in Sections V and VI.

b. Multiple sources may be grouped if units are similar in size and type, burn the same fuel, or are vented to the same stack.

c. Nameplate data are sufficient (give rated or maximum capacity, whichever is greater).

d. Hand-fired, underfeed, overfeed, traveling-grate or spreader stoker; cyclone furnace; pulverized, wet or dry bottom with or without fly ash reinjection: rotary or gun type oil burner; etc.

e. List separately future equipment and expected date of installation.

f. Power generation only.

Date Report Submitted: _____

SECTION II: FUEL COMBUSTION FOR GENERATION OF HEAT, STEAM, AND POWER (CONTINUED)

Plant, institution, or establishment name: Smith, Kline and French Lab. Co. (Carolina)

Source Code[a]	Type of Fuel[b]	Annual Consumption[c]					Hourly Consumption[d]		Percent Used for Space Heat	Heat Content BTU/Quan.[e]	Percent Sulfur[f]	Percent Ash (Solid Fuel Only)[e,f]	Delivered Cost of Fuel $/Quantity	Future Use[g]
		Quantity[d] Gals.	Percent Distribution by Season				Maximum	Average						
			Spring March/ May	Summer June/ Aug.	Fall Sept./ Nov.	Winter Dec./ Febr.								
CBB-1	KERO	58240	25	25	25	25	21 Gal	14 Gal	N/A	135,000	0.7	N/A		-
CBB-2	KERO	58240	25	25	25	25	21 Gal	14 Gal	N/A	135,000	0.7	N/A		-
CBB-3	KERO	374,400	25	25	25	25	90 Gal	60 Gal	N/A	135,000	0.7	N/A		-
DEG-1	DIES.	28	25	25	25	25	7 Gal	N/A	N/A	140,000	0.7	N/A		-
CEG-1	DIES.	168	25	25	25	25	42 Gal	N/A	N/A	140,000	0.7	N/A		-
DOFP-1	DIES.	28	25	25	25	25	7 Gal	N/A	N/A	140,000	0.7	N/A		-
DOFP-2	DIES.	28	25	25	25	25	7 Gal	N/A	N/A	140,000	0.7	N/A		-

a. List code numbers corresponding to each source referred to on page 2, (e.g., II-a, II-b, II-c, etc.), then enter required data on this page, and for the same code number sources in Sections V and VI.

b. Coke, bituminous coal, anthracite coal, lignite; No. 1, 2, 4, 5 and 6 fuel oil; natural gas; LPG; refinery or coke oven gas; residual coke; wood; bark; sludge; etc. (Note: Indicate if two or more fuels are burned in the same boiler and provide all data pertinent to each fuel type.)

c. Fuel data are to be reported on an "as burned" basis.

d. Solid fuel, tons; liquid fuel, gallons; gaseous fuel, 1000 cubic feet.

e. If unknown, please give name and address of fuel supplier.

f. Sulfur and ash content for each fuel should be a weighted average.

g. Estimated percent increase or decrease in fuel usage (by fuel type) per year for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately on page 2 and the expected fuel use on this page.

Date Report Submitted: _____

ENVIRONMENTAL QUALITY BOARD

AIR POLLUTANT EMISSIONS SUMMARY

SECTION III: COMBUSTIBLE SOLID AND LIQUID WASTES DISPOSAL (Recycled Waste)

Plant, institution, or establishment name: Smith, Kline and French Lab. Co. (Carolina)

Combustible solid and liquid wastes disposed of ☒ on site, ☐ off site, ☐ both on and off site. If off site, location of disposal site and/or name of hauler: _____

_____ (If disposal of solid and liquid wastes is partly or wholly on site, complete remainder of this page and Sections IV, V and VI; otherwise, skip to Section IV.)

Normal on-site ~~combustion~~ regeneration operating schedule: _____ Hours per day 5 Days per week 52 Weeks per year 4,160 Hours per year.

Seasonal and/or peak operation period: (Specify) N/A

Dates of annually occurring shutdowns of operations: N/A Additional operating information enclosed ☐.

Source Code[a]	Waste Material			Method of Disposal[d]	Installation Date	Hourly Burning Rate, lbs.		Auxiliary Fuel Used[e]	Percent Excess Air Used in Combustion (Design)	Future Disposal[f]
	Type[b]	Amount Per Year[c]	Percent Combustible			Average	Maximum			
TC-1	Methylene Chloride	206 Gal.	15	Regeneration	--	-	-	N/A	N/A	N/A
"	SD 30 Alcohol	206 Gal.	15	Regeneration	-	-	-	N/A	N/A	N/A

a. List a separate code number to represent each source (e.g., III-a, III-b, III-c, etc.), then enter required data on this page and for the same code number sources in Section V and VI.
b. Rubbish, garbage, mixed garbage and rubbish, waste paper, wood chips or sawdust, etc.
c. Tons, pounds, or gallons/year.
d. Open burning dump; incinerator, single chamber; etc.
e. Indicate whether auxiliary fuel is used in incinerators and pit burning, and the amount.
f. Estimated increase or decrease in combustible solid and liquid wastes disposal rate for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately

Date Report Submitted: _____

SECTION IV: PROCESS/OPERATIONS EMISSIONS

Plant, institution, or establishment name: Smith, Kline and French Lab. Co. (Carolina)

Normal operating schedule: 16 Hours per day 5 Days per week 52 Weeks per year 4160 Hours per year.

Seasonal and/or peak operation period: N/A

Dates of annually occurring shutdowns of operations: N/A. Additional operating information enclosed ☐.

Source Code[a]	Processes or Operations Releasing Pollutants to the Atmosphere[b,c,d]	Date Installation Went on Line	Raw Materials[e] Used for Processes or Operations				Products[g] of Processes or Operations				Intermittent Operation Only: Average Hours/week[h]	Future[i] Increase or Decrease in Process Rate
			Type	Quantity			Type	Annual Average[f]	Quantity			
				Annual Average[f]	Hourly Process Rate, lbs.				Hourly Process Rate, lbs.			
					Design	Maximum			Design	Maximum		
C-1	Mixing, Pressing & Coating		Cimetidine	428T	---	206	Cimetidine Tablets	428 T	-	206	80	N/A
C-2	Mixing & Pressing		Cimetidine Ulcer	11 T	---	5	Cimetidine Tablets	11 T	-	5	80	N/A
T-1	Mixing		Drug Powder	1.4 T	---	0.65	Raw Materials	1.4T	-	0.65	80	N/A
T-2	Mixing		Drug Powder	1.4 T	---	0.65	Raw Materials	1.4T	-	0.65	80	N/A
G-1	Glatt Granulator		Mixing Granulation Drying	115T	----	221	Raw Material	115 T	-	221	20	N/A

a. List a separate code number to represent each source (e.g., IV-a, IV-b, IV-c, etc.) then enter required data on this page and for the same code number sources in Sections V and VI.

b. Multiple sources may be grouped if similar in size and type.

c. Sulfuric acid-contact; aluminum smelting-crucible furnace; cement manufacturing-dry process; etc.

d. The Pollutants to be covered in this survey are: Particulate, Sulfur Dioxide, Nitrogen Oxides, Hydrocarbons, and Carbon Monoxide.

e. Sulfur burned; pig, foundry returns, or scrap aluminum melted; limestone, cement rock, clay, iron ore used; etc.

f. Pounds, tons, gallons, barrels, etc.

g. Sulfuric acid produced; aluminum ingots produced; cement produced; etc.

h. For intermittent processes, indicate average number of hours per week of operation so that estimates of yearly emissions may be obtained.

i. Estimated percent increase or decrease in process rate on a total plant basis for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

Date Report Submitted: _____

SECTION IV: PROCESS/OPERATIONS EMISSIONS

Plant, institution, or establishment name: _____

Normal operating schedule: _____ Hours per day _____ Days per week _____ Weeks per year _____ Hours per year.

Seasonal and/or peak operation period: _____

Dates of annually occurring shutdowns of operations: _____. Additional operating information enclosed ☐.

Source Code[a]	Processes or Operations Releasing Pollutants to the Atmosphere[b,c,d]	Date Installation Went on Line	Raw Materials[e] Used for Processes or Operations				Products[g] of Processes or Operations				Intermittent Operation Only: Average Hours/week[h]	Future[i] Increase or Decrease in Process Rate
			Type	Quantity			Type	Quantity				
				Annual Average[f]	Hourly Process Rate, lbs.			Annual Average[f]	Hourly Process Rate, lbs.			
					Design	Maximum			Design	Maximum		
G-2	Glatt Granulator		Mixing Grinding Drying	115T	-	221	Raw Material	115 T	-	221	20	N/A
WE	Tool Washing		Solvents	55Gal	-	-	Solvents	-	-	-	40	-
PE	Tablet Printer [4]		Solvent Ink	250Gal	-	-	Solvent Ink	-	-	-	20	-

a. List a separate code number to represent each source (e.g., IV-a, IV-b, IV-c, etc.) then enter required data on this page and for the same code number sources in Sections V and VI.

b. Multiple sources may be grouped if similar in size and type.

c. Sulfuric acid-contact; aluminum smelting-crucible furnace; cement manufacturing-dry process; etc.

d. The Pollutants to be covered in this survey are: Particulate, Sulfur Dioxide, Nitrogen Oxides, Hydrocarbons, and Carbon Monoxide.

e. Sulfur burned; pig, foundry returns, or scrap aluminum melted; limestone, cement rock, clay, iron ore used; etc.

f. Pounds, tons, gallons, barrels, etc.

g. Sulfuric acid produced; aluminum ingots produced; cement produced; etc.

h. For intermittent processes, indicate average number of hours per week of operation so that estimates of yearly emissions may be obtained.

i. Estimated percent increase or decrease in process rate on a total plant basis for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

Date Report Submitted: _____

ENVIRONMENTAL QUALITY BOARD

AIR POLLUTANT EMISSIONS SUMMARY

SECTION V: AIR CLEANING EQUIPMENT

Plant, institution, or establishment name: Smith, Kline and French Lab. Co. [Carolina]

Source Code[a]	Type of Air Cleaning Equipment[b,c]	Installation Date[c]	Pollutant Removed[c,d]	Efficiency[e]		Inlet Gas Temperature, °F	Inlet Gas Flow Rate,[f] CFM	Exit Gas Pressure, PSI
				Design Percent	Operating Percent			
C-1	Torit Dust Collector		Dust	99.9	-	160	15,000	+ Ambient
C-2	Torit Baghouse		Dust	99.75	-	-5 amb.	9,300	+ ambient
T-1	Torit Dust Collector		Dust	99.75	-	-5 amb.	6,000	+ ambient
T-2	Torit Dust Collector		Dust	99,75	-	-5 amb.	6,000	+ ambient
G-1	Glatt Filter Bac		Dust	N/A	-	124	4,700	+ ambient
G-2	Glatt Filter Bac		Dust	N/A	-	124	4,700	+ ambient
VC-1	Vaccum Cleaner (Filter Bag)		Dust	98	-	ambient	2,200	+ ambient

a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.

b. Wet scrubber, electrostatic precipitator, fabric filter, etc.

c. Please list future equipment separately.

d. The Pollutants to be covered in this survey are: Particulate, Sulfur Dioxide, Nitrogen Oxides, Hydrocarbons, and Carbon Monoxide.

e. Give efficiency in terms of pollutant removed.

f. At actual flow conditions.

SECTION V: AIR CLEANING EQUIPMENT

Plant, institution, or establishment name: _____

Source Code[a]	Type of Air Cleaning Equipment[b,c]	Installation Date[c]	Pollutant Removed[c,d]	Efficiency[e]		Inlet Gas Temperature, °F	Inlet Gas Flow Rate,[f] CFM	Exit Gas Pressure, PSI
				Design Percent	Operating Percent			
TC-1	Carbon Absorption		Hydrocarbon	-	97	105	3,000	+ ambient
WE	Extractor		Organic Solvents	-	-	ambient	400	+ ambient
PE	Extractor		Ink Solvents	-	-	ambient	400	+ ambient
VC-2	Vaccum Cleaner Filter Bag		Dust	-	-	ambient	1,100	+ ambient

a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.

b. Wet scrubber, electrostatic precipitator, fabric filter, etc.

c. Please list future equipment separately.

d. The Pollutants to be covered in this survey are: Particulate, Sulfur Dioxide, Nitrogen Oxides, Hydrocarbons, and Carbon Monoxide.

e. Give efficiency in terms of pollutant removed.

f. At actual flow conditions.

Repo.. Submitted: _____

SECTION VI: STACK AND POLLUTANT EMISSIONS DATA

Plant, institution, or establishment name: Smith, Kline and French Lab. Co. [Carolina]

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS[a]			
Source Code[a]	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity,[b] ft./sec.	Exit Gas Temperature,[b] °F	Exit Gas Flow Rate, CFM[c]		Pollutant[d]	Quantity		
								Tons Per Year	Lbs. Per Hour	
					Average	Maximum			Average	Maximum
CBB-1	53'	1'-4"	1.89	350	-		Sulfur Dioxide	3.2	-	2.08
CBB-2	[Stack above is common Stack for CBB-1 & 2]							3.2	-	2.08
CBB-3	50'	1'-4"	1.90	350	-		Sulfur Dioxide	18.6	-	8.95
OEG-1	12'	0'-4"			-		Sulfur Dioxide	.002	-	0.69
CEG-1	15'	0'-6"	212	950	-		Sulfur Dioxide	.008	-	2.78
OOFP-1	12'	0'-4"			-		Sulfur Dioxide	.002	-	0.69
OOFP-2	12'	0'-4"			-		Sulfur Dioxide	.002	-	0.69

a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.

b. Values should be representative of average flow conditions for hours of operation.

c. At actual flow conditions.

d. The Pollutants to be covered in this survey are: Particulate, Sulfur Dioxide, Nitrogen Oxides, Hydrocarbons, and Carbon Monoxide.

e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

Date Report Submitted:

ENVIRONMENTAL QUALITY BOARD

AIR POLLUTANT EMISSIONS SUMMARY

SECTION VI: STACK AND POLLUTANT EMISSIONS DATA

Plant, institution, or establishment name: _____

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS[c]			
Source Code[a]	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity,[b] ft./sec.	Exit Gas Temperature,[b] °F	Exit Gas Flow Rate, CFM[c]		Pollutants[d]	Quantity		
					Average	Maximum		Tons Per Year	Lbs. Per Hour	
									Average	Maximum
C-1	25	22"X19"	5,000	140	-	15,000	Particulate	0.00059	-	.00028
C-2	22	19.5"X18.5"	62	+ ambient	-	9,300	Particulate	0.0026	-	.00125
T-1	28	2'X 1'	50	+ ambient	-	6,000	Particulate	0.00338	-	.001625
T-2	28	2'X 1'	50	+ ambient	-	6,000	Particulate	0.00338	-	.001625
G-1	28	0'-8"	225	104	-	4,700	Particulate	0.19	-	0.36
G-2	28	0'-8"	225	104	-	4,700	Particulate	0.19	-	0.36
VC-1	64	0'-8.5"	108	+ ambient	-	2,200	Particulate	0.1352	-	0.065

a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.

b. Values should be representative of average flow conditions for hours of operation.

c. At actual flow conditions.

d. The Pollutants to be covered in this survey are: Particulate, Sulfur Dioxide, Nitrogen Oxides, Hydrocarbons, and Carbon Monoxide.

e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

Date Report Submitted

ENVIRONMENTAL QUALITY BOARD

AIR POLLUTANT EMISSIONS SUMMARY

SECTION VI: STACK AND POLLUTANT EMISSIONS DATA

Plant, institution, or establishment name: _____

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS[c]			
Source Code[a]	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity,[b] ft./sec.	Exit Gas Temperature,[b] °F	Exit Gas Flow Rate, CFM[c]		Pollutant[d]	Quantity		
					Average	Maximum		Tons Per Year	Lbs. Per Hour	
									Average	Maximum
TC-1	15	0'-10"	92	95	-	3,000	Organic Solvents	0.06	-	9.6×10^{-2}
WE	29	0'-10"	33	ambient	-	400	Organic Solvents	0.06	6×10^{-2}	9.6×10^{-2}
PE	29	0'-10"	33	ambient	-	400	Ink & Solvents	0.78	1.56	2.49
TK-1	5'-6"	5'	-	-	-	-	Diesel(1,500 gal)Hydrocarbons	0.00335	-	-
TK-2	underg	6'-4"	-	-	-	-	Kerosene(6,000 gal)Hydrocarbons	0.088	-	-
TK-3	underg	5'-4"	-	-	-	-	Kerosene(3,000 gal)Hydrocarbons	0.044	-	-
TK-4	10'-7"	7'-7"	-	-	-	-	Kerosene (10,000 gals.)	0.1464	-	-

a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.

b. Values should be representative of average flow conditions for hours of operation.

c. At actual flow conditions.

d. The Pollutants to be covered in this survey are: Particulate, Sulfur Dioxide, Nitrogen Oxides, Hydrocarbons, and Carbon Monoxide.

e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

Report Submitted: _____

USED IN CIBA-GEIGY

PACKAGING COMPONENTS	STOCK NO.
LABELS	VARIOUS STOCK NUMBERS. PRINTED AND UNPRINTED MATERIAL.
CIRCULARS	
CATCH COVERS	
SLEEVES	
FOIL (SHEETS & ROLL)	
CARTONS	
STICKERS	
SHIPPING CASES	
PARTITIONS	
PADS	
LINERS	
BLISTERS (SHEETS)	
PLASTIC SEPARATOR	85927
PLASTIC SEPARATOR	85939
CANISTER DESICCANT	87259
AMBER BOSTON ROUND BOTTLE 2 OZ. GLASS	72384
AMBER BOSTON ROUND BOTTLE 8 OZ. GLASS	72388
PLASTIC BOTTLES (TAN)	VARIOUS STOCK NUMBERS.
GRAY RUBBER STOPPERS	73000
GRAY RUBBER STOPPERS	73062
YELLOW STOPPERS	73054
WHITE STOPPERS	73053
BLUE METAL CAPS	VARIOUS STOCK NUMBERS
ALUMINUM CAP	73728
33MM. PLASTIC CAP	75339
24MM. PLASTIC CAP	73300
13MM. ALUMINUM SEAL	73125
13MM. ALUMINUM SEAL	73104
13MM BLUE FLIP-TOP ALUMINUM SEAL	73131

PACKAGING COMPONENTS	STOCK NO.
PLASTIC VIAL	70022
2 DRL VIAL	70069
1 DRL VIAL	70056
1 DRL VIAL (AMBER)	70062
GELATIN CAPSULES	VARIOUS STOCK NUMBERS, PRINTED & UNPRINTED
FRAME	80011
FRAME	80011
FRAME	80021
FRAME	80023
RAYON	VARIOUS STOCK NUMBERS

Stock	ription	Approved Manufacturer		Supplier
16910	Alcohol U.S.P.	P.R. Distillers U.S. Industrial Chem. Co.	(P.R.) (Phila)	P.R. Distillers U.S. Industrial Chem. Co.
16920	Alcohol S.D.#3A	P.R. Distillers	(P.R.)	P.R. Distillers
16003	Artificial Peach Flavor	Fermenich, Inc.	(P.R.)	Firmenich, Inc.
13195	Avicel PH 101 (Microcyrstalline Cellulose,N.F.)	F.M.C. Corp.	(P.R.)	F.M.C. Corp.
13703	Cimetidine Hydrochloride	SK&F Labs. Penn Chemical	(P.R.) (PHL)	SK&F Labs., Guayama, P.R. Penn Chemical, Cork, Ireland
13704	Cimetidine Base	SK&F Labs Penn Chemical	(P.R.) (PHL)	SK&F Labs., Guayama, P.R. Penn Chemical, Cork, Ireland
13931	Cosmetic Ochre (Kohnstamm #3506)	H. Kohnstamm & Co.	(P.R.) (PHL)	H. Kohnstamm & Co.
14383	Diethyl Phthalate	Eastman Chemical Int. Ltd.	(P.R.)	Eastman Chemical Int. Ltd.
13116	Antifoam "A" Emulsion	Dow Corning	(P.R.) (PHL).	Dow Corning Manuel Del Valle
14542	Ethylcellulose NF 10 CPS	Hercules Powder Co. Dow Chemical Inter-American Ltd.	(P.R.) (P.R.)	Hercules Powder Co. Ochoa Ind. Callahan Chem. Co.
14567	Explotab NF XV (Carboxymethyl Starch)	Edward Mendel Co. Inc.	(P.R.)(PHL)	Edward Mendell Co., Inc.
13956	Opaspray K-1-3843	Colorcon, Inc.	(P.R.)	Colorcon, Inc.
15017	Opacode Monogramming Ink S-1-8090	Colorcon, Inc.	(P.R.)(PHL)	Colorcon, Inc.
16050	Phenol U.S.P.	J.T. Baker Mallinckrodt, Inc. Matheson, Coleman & Bell Dow Chemical	(P.R.) (P.R.) (P.R.) (P.R.)	Manuel Del Valle Ochoa Industrial Unicore Chemical Inc. Riverside Chemical SK&F Labs. Phila. American Hospital Supply Merck & Co.

ock	Description	Manufacturer	
16104	Pluronic F-68 (Polyoxy-ethylene-polyoxypropylene) (Glycol F-68)	BASF Wyandotte Corp. (Industrial Chemicals Group)	(P.R.)(PHL)
16210	Povidone U.S.P. (Plasdone C30, Polyvinylpyrrolidone)	G.A.F. Co. *	(P.R.)(PHL)
		BASF Wyandotte Corp. (Industrial Chemicals Group)	(PHL)
16296	Propylene Glycol U.S.P.	Dow Chemical	(P.R.)(PHL)
		Union Carbide Chem. Co.	(PHL)
16310	Propylparaben U.S.P.	Tenneco Chem., Inc.	(P.R.)(PHL)
16497	Resyn 33-1478	National Starch & Chem Corp.	(P.R.)
16799	Sodium Saccharing N.F.	The Sherwin-Williams Co.	(PHL)
		IKUWA Chemical Ltd.	(PHL)
		Aisan Chemical Ltd.	(PHL)
16775	Sodium Phosphate U.S.P.	Mallinckrodt, Inc.	(P.R.)(PHL)
16660	Sodium Bisulfite U.S.P.	Mallinckrodt, Inc.	(P.R.)(PHL)
16702	Sodium Chloride U.S.P.	Mallinckrodt, Inc.	(P.R.)(PHL)
		J. T. Baker	(P.R.)
16750	Sodium Lauryl Sulfate U.S.P.	E. I. Dupont De Nemours	(P.R.)(PHL)
16868	Sorbitol Solution U.S.P.	Merck & Co.	(P.R.)(PHL)
16894	Natural Spearmint Flavor #21407	Fritzche Dodge & Olcott, Inc.	(P.R.)
16995	Sugar, Standard Granulated (Sucrose, NFXV)	Amstar Corp.	(P.R.)(PHL)
		Jack Frost	(PHL)
16996	Beet Sugar (Sucrose, U.S.P.)	British Sugar Corporation	(P.R.)

Manufacturer	
BASF Wyandotte Corp. (Industrial Chemicals Group)	
G.A.F.	
BASF Wyandotte Corp. (Industrial Chemicals Group)	
Manuel Del Valle	
Callahan Chem. Co.	
Tenneco Chemicals, Inc.	
National Starch & Chem. Corp.	
R.P. Chemical Enterprises, Inc.	
George Uhe Co.	
McKesson & Robbins	
Mallinckrodt, Inc.	
Mallinckrodt, Inc.	
Ochoa Ind.	
Manuel Del Valle	
Mallinckrodt, Inc.	
Unicore Chemical, Inc.	
Manuel Del Valle	
E.I. Dupont De Nemours	
Merck & Co.	
Fritzsche Dodge & Olcott, Inc.	
Able Sales	
Tuner Brothers	
SmithKline & French Labs. Ltd England	

* GENERAL ANILINE & FILM Co.

Stock	Description	Approved Manufacturer		Supplier
17353	Talc U.S.P. XIX (WC&D #2755) Lo-Micron	Whittaker, Clark & Daniels	(P.R.)(PHL)	Whittaker, Clark & Daniels
				SK&F Labs, Phila.
16942	Starch	A.E. Staley Mfg. Co.	(P.R.)	A.E. Staley Mfg. Co.
		National Starch & Chemical Co.	(P.R.) (PHL)	Able Sales
14023	FD&C Blue #2 Aluminum Lake	Colorcon, Inc.	(P.R.)	Colorcon, Inc.
		Buffalo Color Corp.	(P.R.)	Buffalo Color Corp.
14145	FD&C Yellow #6 (Sunset Yellow)	H. Kohnstamm & Co.	(P.R.)(PHL)	H. Kohnstamm & Co.
		Allied Chemical Corp.	(P.R.)(PHL)	Allied Chemical Corp.
15502	Hydroxypropyl Methylcellulose USP (Methocel·E15 Premium)	Dow Chemical	(P.R.)	Ochoa Industrial Callahan Chem. Co.
15454	Mafco Magnasweet #180	McAndrews & Forbes	(P.R.)(PHL)	McAndres & Forbes
15460	Magnesium Stearate, U.S.P.	Mallinckrodt, Inc.	(P.R.)(PHL)	Mallinckrodt, Inc.
11680	Methylene Chloride, Technical Grade	Vulcan Materials Co.	(P.R.)	Manuel Del Valle
		Dow Chemical	(P.R.)(PHL)	Ochoa Industrial
		Diamond Shamrock Chem. Co.	(P.R.)(PHL)	Callahan Chem. Co. Pioneer Salt Chem. Co.
15523	Methylparaben, U.S.P.	Tenneco Chemicals, Inc.	(P.R.)(PHL)	Tenneco Chemicals, Inc.
10284	Bromobenzene, Technical Grade (Monobromobenzene)	Dead Sea Bromide Group	(P.R.)(PHL)	Ameribrom, Inc. C/O
		Great Lakes Chemical Group	(P.R.)(PHL)	R.P. Chemical Enterprises, Inc. E.B. Knight Ochoa Industrial
10527	Chlorobenzene, Technical Grade (Monochlorobenzene)	Allied Chemical	(P.R.)	R.P. Chemical Enterprises, Inc.
		E.I. Dupont De Nemours	(P.R.)	SK&F Labs., Phila.
		Dow Chemical	(P.R.)	Ochoa Industrial

	Description	Approved Manufacturer		Supplier
	Chloroform, Technical Grade	Allied Chemical	(P.R.)(PHL)	R.P. Chemicals Enterprises, Inc.
		Dow Chemical	(P.R.)(PHL)	Ochoa Industrial
		Vulcan Material Co.	(P.R.)(PHL)	Manuel Del Valle
	Cupric Carbonate, Powdered	Chemetron Corp.	(P.R.)(PHL)	Chemetron Corp.
		Cities Service Corp. (CITCO)	(P.R.)(PHL)	McGean Chem. Corp. Cities Service Corp. (CITCO)
				SK&F Labs., Phila.
56	Dimethylformamide, Technical Grade	E.I. Dupont De Nemours	(P.R.)(PHL)	E.I. Dupont De Nemours
		MitsuBushi Gas Co.	(PHL)	McKesson & Robbins
				ICC Solvents & Chemicals
				Ochoa Industrial
323	Hydrochloric Acid, Technical Grade (Muriatic)	Allied Chemical	(P.R.)(PHL)	R.P. Chemical Enterprises, Inc.
		PPG Industries	(P.R.)	Textile Chemical Co.
				George S. Coyne
				Manuel Del Valle
				Ochoa Industrial
		ChileanNitrate Sales Corp.	(P.R.)(PHL)	SK&F Labs, Phila.
1500	Iodine	Shell Chemical Co.	(P.R.)(PHL)	Shell Chem. Co.
		Union Carbide Chem. Co.	(P.R.)(PHL)	Union Carbide Chem. Co.
11521	Isopropyl Alcohol, NF	Esso, Inc. (Esso Inc. is the corporate name in P.R.)	(P.R.)	Manuel Del Valle
				Ochoa Industrial
				R.P. Chemical Enterprises, Inc.
		Arco Chemical Co.	(PHL)	Arco Chem. Co.
		Texas City Refining, Inc.	(P.R.)	
		Exxon Chemical Co.	(PHL)	Exxon Chem. Co.
		(Exxon Chemical Co. is the corporate name in the U.S.).		Esso, Inc.
		Olin Corp.	(P.R.)	Olin Chemicals Group
10013	M-Aminobenzotrifluoride	Union Carbide Chem. Co.	(P.R.)(PHL)	Union Carbide Chem. Co.
11694	N-Methylpiperazine	Rexolin Chemicals	(P.R.)(PHL)	S.S.T. Corp.
				Manuel Del Valle
				Ochoa Industrial
				R.P. Chemical Enterprises, Inc.
				Able Sales
				SK&F Phila.

ock	Description	Approved Manufacturer		Supplier
80	Potassium Carbonate, Calcined (Anhydrous)	Sorbin Chemical Co.	(P.R.)(PHL)	Bodman Chemical Co.
		Allied Chemical	(P.R.)(PHL)	McKesson & Robbins
		Hooker Chemical Corp.	(PHL)	Allied Chemical
		Commercial Solvents Corp. (IMC Chemical Group)	(PHL)	R.P. Chemical Enterprises, Inc.
				Ochoa Industrial
				Manuel Del Valle
				Commercial Solvents Corp.
189	Potassium Hydroxide, U.S.P. Pellets	Mallinckrodt, Inc.	(P.R.)(PHL)	Mallinckrodt, Inc.
		J.T. Baker	(P.R.)(PHL)	Manuel Del Valle
				Ochoa Industrial.
385	Sodium Amide (Sodamide)	Farchan Div. Chemical Samples Co. (Chemsampco, Inc.)	(P.R.)(PHL)	Chemsampco, Inc.
521	Sodium Benzoate, N.F. XV (Powder)	Tenneco Chemicals, Inc.	(P.R.)(PHL)	Tenneco Chemicals, Inc.
646	Sodium Biphospate, U.S.P.	Mallinckrodt, Inc.	(P.R.)(PHL)	Mallinckrodt, Inc.
				Ochoa Industrial
				Unicore Chemical Inc.
				Manuel Del Valle
0504	Sodium Hydroxide, U.S.P. (Pellets) 97% (Also purchased as Caustic Soda)	Mallinckrodt, Inc.	(P.R.)(PHL)	Mallinckrodt, Inc.
		Allied Chemical	(P.R.)	Ochoa Industrial
		PPG Industries	(P.R.)	Manuel Del Valle
				R.P. Chemical Enterprises, Inc.
				Allied Chemical
				Callahan Chem. Co.
6826	Sodium Tartrate, ACS Reagent Grade	Mallinckrodt, Inc.	(P.R.)(PHL)	SK&F Labs., Phila.
				Ochoa Industrial
				Mallinckrodt, Inc.
[illegible]	Sulfur, Sublimed, N.F.	Stauffer Chemical Co.	(P.R.)(PHL)	Stauffer Chem. Co.
				SK&F Labs., Phila.

Stock	Description	Approved Manufacturer		Supplier
12700	Toluene, Nitration Grade	Allied Chemical	(P.R.)	Allied Chemical
		American Mineral Spirits Co.	(P.R.)(PHL)	Manuel Del Valle
		Hess Oil Corp.	(P.R.)	R.P. Chemical Enterprises, Inc.
		Esso, Inc.	(P.R.)	Ochoa Industrial
		CORCO, Inc.	(P.R.)	CORCO, Inc.
		Texaco, Inc.	(PHL)	Esso, Inc.
				Hess Oil Corp.
12729	Triethylamine	Pennwalt Chemical Co.	(P.R.)(PHL)	Pennwalt Chem. Co.
		Union Carbide Chemical Co.	(PHL)	Union Carbide Chem. Co.
				SK&F Labs., Phila.
12750	Trimethylene Chlorobromide (Also purchased as TMCB)	Rhone-Poulenc	(P.R.)(PHL)	Rhone-Poulenc
		Steetly Chemicals Ltd.	(PHL)	George Uhe Co.
		Shell Ltd.	(P.R.)(PHL)	Acic Ltd.
		Dead Sea Bromide Group	(P.R.)(PHL)	Ameribrom, Inc. C/O
				R.P. Chemical Enterprises, Inc.
				E. B. Knight, Inc.
				SK&F Labs., Phila.
16285	Primojel ELIMINATED AS PER EIDEWald MEMO OF 2/24/81. @ 3/18/81.	Edward Mendell Co.	(P.R.)(PHL)	Edward Mendell Co. ELIMINATED AS PER EIDEWald MEMO OF 2/24/81. @ 3/18/81.
				SK&F Labs., Phila.
16919	Alcohol, S.D. Spirits #30	P.R. Distillers	(P.R.)	P.R. Distillers
		U.S. Industrial Chemical Co.	(P.R.)(PHL)	U.S. Ind. Chem. Co.
		Commercial Solvents Corp.	(P.R.)(PHL)	Commercial Solvents Corp.
		(IMC Chemical Group)		Bodman Chemical Co.
15779	Nitrogen, U.S.P. (GAS)	Matheson Div., Will Ross, Inc.	(P.R.)	Matheson Div., Will Ross, Inc.
		Air Products	(PHL)	Air Products
		Woodland Oxygen Co., Inc.	(PHL)	Woodland Oxygen Co., Inc.
		Linde Div., Union Carbide Corp.	(PHL)	Linde Div., Union Carbide Corp.
		General Gases Corp.	(P.R.)	General Gases Corp.
11332	Hydrogen Chloride Gas, Anhydrous	Vulcan Material Co.	(PHL)	Vulcan Materials Co.
		Air Products & Chemicals, Inc.	(PHL)	Air Products & Chemicals, Inc.
		Gas Products Corp.	(P.R.)	Gas Products Corp.

* Commonwealth Oil Refining Co., Inc.

Stock	ription	Approved Manufacturer		Supplier
12700	Toluene, Nitration Grade	Allied Chemical	(P.R.)	Allied Chemical
		American Mineral Spirits Co.	(P.R.)(PHL)	Manuel Del Valle
		Hess Oil Corp.	(P.R.)	R.P. Chemical Enterprises, Inc.
		Esso, Inc.	(P.R.)	Ochoa Industrial
		CORCO, Inc.	(P.R.)	CORCO, Inc.
		Texaco, Inc.	(PHL)	Esso, Inc.
				Hess Oil Corp.
12729	Triethylamine	Pennwalt Chemical Co.	(P.R.)(PHL)	Pennwalt Chem. Co.
		Union Carbide Chemical Co.	(PHL)	Union Carbide Chem. Co.
				SK&F Labs., Phila.
12750	Trimethylene Chlorobromide (Also purchased as TMCB)	Rhone-Poulenc	(P.R.)(PHL)	Rhone-Poulenc
		Steetly Chemicals Ltd.	(PHL)	George Uhe Co.
		Shell Ltd.	(P.R.)(PHL)	Acic Ltd.
		Dead Sea Bromide Group	(P.R.)(PHL)	Ameribrom, Inc. C/O
				R.P. Chemical Enterprises, Inc.
				E. B. Knight, Inc.
				SK&F Labs., Phila.
16285	Primojel ELIMINATED AS PER EDEWald MEMO OF 2/26/81. @ 3/18/81.	Edward Mendell Co.	(P.R.)(PHL)	Edward Mendell Co. ELIMINATED AS PER EDE WALD MEMO OF 2/26/81. @ 3/18/81
				SK&F Labs., Phila.
16919	Alcohol, S.D. Spirits #30	P.R. Distillers	(P.R.)	P.R. Distillers
		U.S. Industrial Chemical Co.	(P.R.)(PHL)	U.S. Ind. Chem. Co.
		Commercial Solvents Corp. (IMC Chemical Group)	(P.R.)(PHL)	Commercial Solvents Corp.
				Bodman Chemical Co.
15779	Nitrogen, U.S.P. (GAS)	Matheson Div., Will Ross, Inc.	(P.R.)	Matheson Div., Will Ross, Inc.
		Air Products	(PHL)	Air Products
		Woodland Oxygen Co., Inc.	(PHL)	Woodland Oxygen Co., Inc.
		Linde Div., Union Carbide Corp.	(PHL)	Linde Div., Union Carbide Corp.
		General Gases Corp.	(P.R.)	General Gases Corp.
11332	Hydrogen Chloride Gas, Anhydrous	Vulcan Material Co.	(PHL)	Vulcan Materials Co.
		Air Products & Chemicals, Inc.	(PHL)	Air Products & Chemicals, Inc.
		Gas Products Corp.	(P.R.)	Gas Products Corp.

* Commonwealth Oil Refining Co., Inc.

Stock	Description	Approved Manufacturer		Supplier
12050	Petroleum Ether	J. T. Baker Chemical Co.	(P.R.)	Manuel Del Valle
12902	Yellow Wax, N.F. XIII	Frank B. Ross Co.	(P.R.)(PHL)	Frank B. Ross Co.
13001	Acacia, N.F. XV Spray Dry	Stein Hall & Co., Inc. Tragacanth Importing Corp. (T.I.C.)	(P.R.)(PHL) (P.R.)	John K. Grewe Able Sales
13067	Glycine U.S.P. (Amino Acetic Acid)	Chattem Chemicals (Division of Chattem Drug and Chemical Company)	(P.R.)	Chattem Chemicals
13300	Flavor Compound #21145 (Artificial Banana Vanilla)	Fritzsche Dodge & Olcott Inc.	(P.R.)	Fritzche - D & O Merck & Co. Manuel Del Valle
13325	Benzyl Alcohol, Reagent Grade	Merck & Co.	(PHL)	Arthur H. Thomas SK&F Labs., Phila.
13414	N-Butyl Alcohol, Reagent Grade	Shell Chemical Co. J. T. Baker Chemical Co. Fisher Scientific	(PHL) (P.R.) (P.R.)	Shell Chemical Co. Manuel Del Valle Fisher Scientific
13600	Carnauba Wax, Powdered NF XV	Frank B. Roos Co., Inc.	(P.R.)(PHL)	Frank B. Ross Co., Inc.
14024	~~Okie-Velo Blue Opaque Color~~ OPALUX AS-4277	F. G. Okie, Inc. DIVISION OF COLORCON, INC.	(P.R.)	F. G. Okie, Inc. DIVISION OF COLORCON, INC.
14131	FD&C Yellow #5 (Tartrazine)	H. Kohnstamm & Co. Allied Chemical Corp.	(PHL) (PHL)	H. Kohnstamm & Co. Allied Chemical Corp.
14543	Ethyl Cellulose, N.F. XIV 15 cps.	Hercules Powder Co.	(PHL)	Hercules Powder Co. Ochoa Ind. Callahan Chem. Co. SK&F Labs., Phila.
14740	Glycerin, U.S.P. XIX	Proctor & Gamble	(P.R.)(PHL)	Manuel Del Valle Proctor & Gamble

Stock	Description	Approved Manufacturer		Supplier
14700	Gelatin, U.S.P. XIX (Hy Prime P)	Kind & Knox Gelatin Corp.	(PHL)	Kind & Knox Gelatin Corp.
14925	Hydrochlorothiazide, US.P. XIX (Ciba Code 304464)	Ciba Pharmaceutical Co., Chemical Sales Division, Ciba-Geigy Corp.		Ciba Pharmaceutical Co.
15218	Lactose, U.S.P. XIX Spray Dried	Foremost Foods Company Samrak Chemical Corp.	(PHL) (P.R.)	McKesson & Robbins Able Sales Co., Inc. Unicore Chemical Inc. SK&F Labs., Phila
15546	Light Liquid Petrolatum U.S.P. XX	Witco Chemical	(PHL)	Witco Inter-American Corp. L. Sonneborn Sons, Inc.
16150	High Density Polyethylene (CITCO Code CS-212)	Cities Service Company (CITCO)		CITCO
16205	Polysorbate 80 NF XV (Tween 80)	ICI Americas, Inc.	(PHL)	ICI Americas, Inc. Carmac Chemical Co.
16950	Stearic Acid, Powdered NF XV (Emery Code Emmersol 6332)	Emery Industries, Inc.	(PHL)	Emery Industries, Inc.
16991	Confectioner's Sugar NF XV 6X (with 3% starch)	Amstar Corporation National Sugar	(PHL) (PHL)	Turner Brothers Able Sales Co., Inc.
17393	Calcium Sulfate, N.F. XIV (Dihydrate) (Also purchased as Terra Alba)	British Gypsum Ltd. Whittaker, Clark & Daniels, Inc.	(PHL) (PHL)	Bodman Chemical Co. Whittaker, Clark & Daniels, Inc. Charles B. Crystal Co., Inc.
19007	PL-4587 Tan Polyethylene Unicolor 1:18	Westchester Plastic Division, Ametek, Inc.	(PHL)	Westchester Plastics Div., Ametek, Inc.
22950	Triamterene U.S.P. XIX	SK&F Chemical Division American Cyanamid Co.		SK&F Chemical Division American Cyanamid Co.
14927	Hydrochlorothiazide, U.S.P. (Ciba Code 304463)	Ciba Pharmaceutical Co., Chemical Sales Division, Ciba-Geigy Corp.		Ciba Pharmaceutical Co.